#  <br> BULLETIN <br> OF THE <br> MADRAS GOVERNMENT MUSEUM <br> EDITED BY THE SUPERINTENDENT <br> Indian Epigraphy and South Indian Scripts 

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(Curator,
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NEW SERIES-General Section. Vol III. No. 4, 1952

Published by :
The Principal Commissioner of Museums Government Museum

Chennai-8
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First Edition : 1948
Reprinted : 1966, 1999

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Price : Rs. 285.00

Printed at Madipakkam Stationery \& Register Making Industrial Co-op. Society Ltd., Chennai-81.

## CONTENTB



Dedicated with affeotion and esteem to my brother-in-law
Sri P. N. Ramaohandran, BrA., under whoee fostering oare I grew up and had my education, and to my friend.
Sri K. V.'Ramicienambant, B.A., who broadened my mathetio vision.

## AUTHOR'S PREFACE.

WHEN studying epigraphy I keenly felt the necessity of knowing at a glanoe on the same ohart the development of each individual letter of the Indian alphabot in different aross and during conturies in differant types of soript developed from the same parent stock. I therefore, prepared a genealogioal tree for each letter of alphabet for comparing the stages dof development of the various seripts of India in general and South India in partioular. The late Rao Bahadur Dikshit was interested in this scheme of presentation of palmography and advised me to complete che work giving it all my attention. As I had seen my book on Amaravathi-sculpture through the press in the ineantime I was free to devote myself to this. I suggested to Dr. Aiyappan, Superintendent, Government Museum, Madras, that I would prepare this book on Indian epigraphy and South Indian soripts. He readily agreed and the permission of Government was sougat and obtained. In the meantime I planned the book with illustrations shawiag the earliest roprosontations in sculpture of manusoripts, signatures, seals with legonds, ornamontal letters, shell characters, and 'so forth. Having long felt that it was essential to give seleot passages from insoriptions not only to provide a sort of exercise for the stadent to attempt reading them, but also with in id $3+$ of siowing the litgrary b3uty of composition in epigraphy, I have given solest pieso3 with all the letters carafully drawn from the faosimiles. As however the litarary beauty of epigraphy requires to be explained at some length I have deveted a chapter for it. The influence of our seripts abroad specially in South Eist dsia has boan considerable and I have also dealt with it. The soribs, docungat, soal so essantially related to the offoial mode of writingand record has bayn liscuased, as also ornamented varieties of letters. Epigraphy being usually a neglected subject, I have discussed the value and neded for its study in the introductory chapter. The plates given at the end represent some of the valuable originals in the epigraphical collection of the Madras Govern ment Museum. The constant kind enquiries from England about the progress of this book by Dr. Gravely, retired Supsrintendent, Government Musoum Madras, whose very kind interest in my work has been a great encouragement has in no small measure helped me to progress in this in spite of various press ing items of work in my rearrangement of the Archæological galleries of the Indian Muscum, Calcutta, where I was in the meantime posted early in 1946. Dr. R. E. M. Wheeler, the Director-General of Archæology in India, warmly
encouraged me in this work and exhorted mesto finish this alongside with the gallery work of the Indian Museum. Dr. Suniti Kumar Chatterji whose overwhelming kindness made me at once fecl at home in Bengal has also kindly expedited me in this. I am thankful to Dr. R. C. Majumdar for giving me a reprint of his paper on the development of scripts in Annam which was helpful in the preparation of my chart showing the development of Indian scripts abroad. The magnificient works of Buhler, Ojha, Fleet, the volumes of Epigraphia Indica, South Indian Inscriptions, Corpus Inscriptionum Indicarum, Indian Antiquary and other journals and books have all been of immense help in my work. A bibliography is added at the end. It is a great pleasure to me to convey my thanks to all my friends who have been very kind to me in my study of epigraphy particularly Dr. B. Ch. Chhabra, Mr. M. Someselhara Sarma and Mr. V. Prabhakara Sastri. I cannot adequately express, my gratitude to Mr. T. N. Ramachandran who at the instance of our reyered Professor Mahamahopadhyaya S. Kuppuswami Sastriar very kindly introduced me to the study of Archaeology after my graduation from the Sanskrit Department of the Presidency College. To Dr. Aiyappan I am extremely thankful for his personal interest in expediting the publication. In conclusion I warmly thank Mf. Bhudev Mukherji for his ready help in the preparation of the typed manuscript for the press. To Mr. Asoke Kumar Bhattacharya I am grateful for readily undertaking the preparation of the Index.

archarological Section, Indian Museum,<br>C. SIVARAMAMURTI. Calcutta, the 5th January 1948.

## AUTHOR'S PREFACE TO THE SECOND EDITION.

The reprinting this book has long awaited. As this was in the press myfriend Mr. I. Mahaderan, M.A., I.A.S., a brilliant young scholar in the field of South Indian epigraphy who has made a careful study of this book, offered some valuable suggestions which have been incorporated. I heartily thank him for this.
S. RANGAMANI, I.A.S. Principal Commissioner of Museums

Government Museum, Chennai - 600008.

## PREFACE

The history of India, unlike the histories of several western countries, has got to be pieced together from the remains of her material culture. It is quiet interesting to note that such remains of the past, abound in India. Inscriptions form a major share of those materials. They are important from the point of view of chronology and other aspects of social life. The Government Museum, Chennai can claim with justifiable pride that it is one of the best museums in India which possesses unique collections of inscriptions on stone and copper plates. Dr. C. Sivaramamurti's "Indian Epigraphy and South Indian Scripts" published in 1966 is a commendable work in the field of South Indian Epigraphy. It catered the needs of serious scholars as well as the interested general public. Soon after its publication the copies went out of print. The need for reprinting the same was felt especially in view of great demand for copies both from scholars and students alike. Knowing that there are a number of Museums and Archaeology departments in the Universities, I have very little doubt that a large number of Curators and students would derive benefit by studying the same.

Chennai-8.
24.02.1999


# INDIAN EPICRAPHY AND SOCTH INDIAN SCRIPTS 

 BYC. SIVARAMAMURTI, M.A.

INDIAN EPIGRAPHY.
INTRODUCTORE
One of the most important sources of information for reconst ructing the history of India and weaving the web of true and logical narration of facts is the study of inscription. India is rich in inscription and the considecable material already brought to light is indeed most valuable and interesting from different points of view. lis spite, however, of the excellent efforts of the Epigraphical Department to save the inscriptions. there is a destructive agency of such tremendous proportions present all over that without in kindsy understanding and interest in the mind of every individual in every village thin tendency for testruction cannot bestopped. Every day and evory hour the village-anith is prohalily in annk eormer of some village melting down a precious copper plate in the possession of some private family for utilizing the metal. The vandalism of misgrtided fathth las demanded a heasy toll of most valuable inscriptions an instance may be cited from dmaravathi where after rabbing out all inscriptions and sculpture to satisfy Mislim conscience. the carved stupa slabs were utilized in building construction. Similarly, a large number of inscribedotonem, built up with facemto the watl while transforming a Hindu strueture into a mongucais in lu-tuiversity of Bhoja at.Dharia, require urgently to be resened. In the Hindu temples theniselves the tragedy of pious renovation has undone most of the labours of the mighty monarchs of old to hand over recorded history in inscriptions, as the process. of renovation emphasizes for economy the utilization of the old material by rechiselling and renewing, or rather nore correctly to put it; ruining the figures and obliterating inscriptions wherever they ocenr. In South India which abounds in temples and equally in pious renovators the problem is an urgent one. The lảst surviving inscribed pillar of a derelict Sūryainuņ̧apa from Kïncipuran recording the Suryaśataka of Mayûra in Cola letters of the 10 th century A.D. was broken and $u$ slized by the ignorant temple trustees as building material ; the small cost of purchasing extra slab or two may have been saved but at tremendous cost to archroology.
The Public Works Department which has often used rich architectural, sculptural and epigraphical material for their work utilized the stones from the ramparts of the stately temple at Gangaikondacholapuram, Tanjore district for constructing a dam across the Cole,roon. The Käveripãkam tank is studded with the most exquisite carvings from South India. Another vandalistic tendency is the use of gold and silver coins as buttons, studs and the like with the result that the legends are obliterated (Ind. Ant. XIV, p. 325).

The study of epigraphy, therefore, is a matter of vital importance. The inscriptions throw light on the life of sovereigns and the people over whom they ruled. Important meidents ara' recorded in them. Sometimes they supply or strengthen a weak link in accounts of dynasties known to us from other literary sources. They help us to locate the sites of ancient places by the geographical material recorded in them. They introduce us

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to institutione prevailing in the country at the time of their record. They supply us' with a complete list of the desiguation of officers of State to whom different functiona were allocated. The prosperity of the country by sea-borne trade and privileges of merchant guilds are herein pictured. The religious faith, toleration or bigotry, endowments and chanities for temples, monasteries, universities, etc., are recorded. Maintenance of charitable institutions, hospitals and colleges is herein mentioned.

The long and pompous descriptions, of the royal families known as Pruśustis or Meykirtis give graphic accounts of various exploits. In the grants where the extent of land is specified with boundaries and other particulars, the names of villages and other geographical details help identification of thespot in terms of modern location. Modern Ahicchatra is mentioned as Ahiochaträbhukti in the Banskhera plate of Sri Hargavardhana, Stbanagundura is not a far cry from modern Tälgunda nor Elăpura from Ellora nor Kalyãnapura from Kalyan. The exact location of Lambini was possible only by the mention of tbe place in the Rummendai pillar inscription of Asoka found in the place. In an inscription from Amaratvati the word 'Kwlüraniväsikassa' points to a resident of ancient Kolura which may be identified with modern Kodduru. Kondukur and Bezwada are mentioned in an Eustern Cälukyan inscription in Telugu of the 9th centary A.D. Modern Pithapur is kuown at Pisfapua in an early inscription.

The royal Prafastis and Mrykirtis are repented at great lenght in the long stone-out insoriptions running the whole length of the outer plinth and walls of the sanctum in sone temples. One of the most classical instances of such inscriptions is the group, on tha walle of the Brhadisvara temple at Tanjore that records the erection and installation of the famous deity Rājarajesvaramudiār by the great emperor Rājarājacola. All the great gifts made by him, his sisters, queens, noblemen and generals are recorded ; mauy numute details are mentioned regarding the infinite number, weight and value of jewels and beantiful metal images presented to the temple, some of the latter being among the finest of early Colla workmanship yet known. The variety of jewels of the period and their patiems and workmanship as we gather from these inscriptions, is amazing. A few names will serve as a

 lock frmed in the fashion Jonckas, oali and valnknoti- earing, blrediam-auspicioue mark, sulti-ornament for the forehead, kondanan or kondattudur-necklace, katakambracelet, modiram finger ring, pattigai-girdle, tiruppattam-diadem, mukutain-crown, nuttlsvalaiyal o ratnavalaiyal-pearl bracelet or jewelled bracelet. These are just a few of a long list of ornaments. The inscriptions mention different varieties of pearls like valfam (cound), anuvatfam (slightly curved), oppumuttu (hollow pearls), tugumuttu (small pearis), eto.

The insoriptions furnish a good deal of information regarding weights and measures; tables of measures can be made out by a study of the inseriptions where even the smallest measure is mentioned; similarly also regarding the weights used for gold, silver, copper and
other metals. Just as the measure, drona, was started by the Nandas 'Nandopakramam dronah similarly some measures were started by Pallava and Cola kings. Sometimes they were named after the kings themselves like Arumolidevan after Räjarāja or Videlvidugu after Pallava Mahendravarman or more often after the gods like Daksiṇämeruvidangan and Adavallän. From the inscriptions we get an insight into the price of articles to be compared with modern prices but it was mostly in terms of paddy. rice, pulse ghee. oil, etc.

The brilhant paper on irrigation in ancient times by V. Venkayya innual Report of the Director-General of Archaeology in India for 1903-4) shows how valuable inseriptions are in enriching our knowledge about the facts of irrigation in ancient times. The insoription mentioning Mahendratatāka at Mahendravādi is among the most important Pallava documents. The Vairāmegatatā̃ka, Parämeşarataṭāka and Chiträmegałatäka are other irrigation tanks of the Pallava period. The Tiruvallarai tank came into being during the reigo of Dantrvarmap. The high bund built by Karikāla for the Kāveri, famuna in literature, is mentioned in inscription as also other irrigation canals opened by Cola
 also mentioned suon water channels.

The famous Bhojasägar is a feat of engineering skill, and one of the largest irrigation tanks constructeli in India. It really stirs our pride to read of how Bhoja, the great,king, ulministrator, conqueror, poet, patron of poets, scholar in different branches like Vyäkaraṇa Alam̉kāra, Sänkbya, Yoga Silpa and Sthäpatya was also an engineer and took special pride in this great irrigation lake on the waters of which his boat glided softly as he watched the scenery around.

An irrigation tank of huge dimensions which has existed in India from the earliest historical times having been repaired during the Mauryan period twice and again during the time of the Kustrapa king Rudradäman is mentioned yet once more during the time of the Guptas in the Junãgadh inscription of Skandagupta. The lake Sudarsana was again carefully rebuilt with masonry work making the embankment really strong (Fleet C. Inser. ${ }^{4}$ Ind.नIII, p. 61) ; but the most picturesque description in epigraphy describing the overflow from the huge water reservoir is recorded in the inscription of Mahäksatrapa Rudradaman wnere the same Sudarsana lake forms the object of description.

If the discovery of tribal coins of the Yaudheyas, Arjunāyanas, Audumbaras, Mälavas, Pañoălas, Vatāsyakas, etc., has helped the historian to understand literary sources better and reconstruct the history of democratic institutions in ancient India, inscriptions have helped 'nim a thousandfold. Juas as the discovery of Kautuilya's Arthaśästro revolutionized the viewpount of the historian of India regarding her political institutions so also the publication and interpretation of the Uttaramallur inseriptions describing village institutions in the 10th centry A.D bave removed all doubts regarding the innate spirit of self-governing democratic
bodies in South India from very early times. The various qualifications required of a candidate standing for membership in the village assembly are given, the minimum property, age limit, character and equipment. Disqualifications are also mentioned. The method of election is most interesting. The village was dirided into a number of wards or centres where pots were kept with their mouths covered, leaving a slot for the voting card, z small palm-leaf ticket with the name of the person noted to be dropped in. On the day of election, all the people of the village gathered together, the contents of each pot made into a bundle and all emptied into an empty pot and well shaken. A boy who knew nothing about all this was to take a card at random from the pot and the name was read out. This was done in the presence of arbitrators, near the village temple. One man was chosen for each ward. After this general election, several committees were formed for looking after gardens, tanks, fields, gold, the wards, administration of justice, etc.

The system of punishment and administration of justice in the-oase of criminal offence can be learnt from inscriptions. An example may not be out of vlace. A man hunting at night missed his aim at the boar and shot a human being. He wes ordered to give thirtytwo cows for a lamp to be kept burning in the temple for the merit of the deceased

The inscriptions also give glimpses regarding the social conditions of the time. In a Vijayanagara inscription we nre told that the emperor settled the disputes between a Vaispava Jeer and a Jain teacher by making them agree to be friends and raised no points of dispute. In aunther Vijayunagara inscription there is a graphic account of how the learned scholars in all Lranches of sacred stndies assembled and signed a document which forbade Konyrisullive and Vuradaksinä in any marriage arrangement and threatened punishment by the king and social exclusion from the community ror parties receiving either (S. Ind Inscr. I. p, 8t), Special privileges like the bride and bridegroom riding a horse in procession being allowed by royal command (Epigraph Ind. VI, p. 346) is also gathered from inscriptions.

The temple was one of the greatest institutions created by the Indian genius. It was the hub on which revolved the whole life of the rillage. The temple provided for the education of the scholar, the amusement of the public, the cultivation of art and aesthetic sense and for the piety of the worshippers. The temple, as can he gathered from the inscriptions, was at once a great centre of various activities. The great endowmentsmads to temples were not in vain. The sense of responsibility of the committees that managed the temples was very great and it should be remembered that high character and scholsrship were essential for those who were to serve on these committees. The temples provided for the conducting of classes in various sciences and systems of philosophy grammar rhetoric and religious hymné. In inscriptions from Ennāyiram we have a long list ot the various courses of study, the number of teachens, and students for whose maintenance provision was made. An excellent scheme of both javenile and adult education on the nobleat lines for imparting right ideas of social life and conduct, right morals, incorraptible
ways, sound zeneral knowledge of the affat of the world, of institution political and social, and of economics from a broad view-point, was all arranged by the king through the exposition of special parts of the Mahäbhärata, the encyclopædic national epic, which has shaped Indian thought and character through the ages.

Hospitals were maintained by the temples. A Käkatiya inscription from Mãlkāpuram mentions a maternity hospital. Another inscription in Tamil gives a long list of medicines stocked and the quantity of each. In times of famine the temples, being rich institutions dedicated to the service of humanity, undertook the feeding of people on a large scale.

Provision was made in the temples for morning and evening music, the pipers, drummers, flutists and others being given separate land allowances. An inscription mentions the arrangement for the play of the Vinä in the temple. Having myself witnessed $i_{i n}$ a large but neglected, out of the way temple in my district the dance and abhinaya performed before thè deitv, the song being sung and commented in the language of gesture according to the canons of Bharata, I can say that it is no exaggeration that either Rajjaraja or Rājendra wnathrilled when he witnessed a great nätya performance in one of the temples; but the inscription does mention in glowing terms the king's high appreciation of this art and his reward therefor. The Nätya-mandapa in the temple was explicitly for this purpose: However prude social reformers may be on the question of the nautch, it was a necessary institution in she temple. Similarly, drama was fostered, and the Ranga-mandapa in the temple served as the open-air theatre and we learn from inscription of the drama, Raja rājeśvara Nätaka, enacted during the time of Rājendra Cola I in such a theatre.

Provision was made for the chant of Devãram in Saivite temples and the hymns of the $\bar{A}|̣|=a r s s ~ i n ~ V i s ̣ n u ~ t e m p l e s . ~ S i m i l a r l y ~ a r r a n g e m e n t s ~ w e r e ~ m a d e ~ f o r ~ t h e ~ c h a n t ~ o f ~ t h e ~ V e d a s, ~$ Rg, Yajus and Säma. The temple provided ocoupation for wood-carvers, sculptors, painters, gardeners, garland-makers, potters, watermen, cooks and accountants, among others.. The festivals conducted at periodic intervals attracted crowds from distant places and large fairs convibuted to that healthy social intercourse which is a unifying bond between villages, aua districts. We learn from insoriptions that the kings also supported educational institutions (ghatikas), outside the temple precincts, solely dedicated to the dissemination of knowledge in the different branches of studies. These ghatikas were looked upon with great respect and the one at Käñcĩ took an important lead in the election of the prince Nandivarman Pallavamalla to the Pallava throne as is gathered from the inscription in the Vaikunthanerumāl temple. It is from inscriptions that we learn of the friendly interest that the kings took in the various religions other than their own. The Cüdämanivihära at Negapatam was an instance of a Buddhist institution fostered by the Colas. The sister of Rājarāja, thę queen Kundavai, was responsible for a Jaina temple at Tirumalai. This ia not an isolared instance. King Devarāya similarly built a Jaina temple. We have the
elansical instauce of Asoka giving his opinion in the matter. It is from his edicts we learn that it is the most foolish thing for one interested in his own faith to persecute the faithe of others and Asoka has expressly preached tolerance, nay, requested active support for faiths other than one's own.

Sometimes there may be a stone in a village with quaint figures of an archer and cows ; of a man figlting a tiger; or of a warrior on elephant or horseback fighting a rival. These stones may sometimes contain inscriptions describing a hero who died fighting in a Gograhana (oattle-raid), a man who killed a tiger which was harassing villagers, a devotee fulfilling his vow by offering his head; or of a warrier killed in battle being gloriously transported to heaven. Sometimes the slab represents the upraised female hand with bracelets and the inseription would mention the act of Sali committed by the woman on the funeral pyre of her husband. We have classical mediæval examples of Sati in the noble queen Yabonati of Prabhākaravardhana and in Vānavanmahädevī, the wife of Sundaracola ; both of them were great queens, mothers respectively of the great emperors, Harsa and Räjaraja. And an inscription from the femple of Rājaräja at Tanjore mentioned the image set up by princeea Kundavai for her mother, Vānavanmahādevi.

From the inscriptions, again, we gather an anroun of information about land divisions, assessment, survey and settlement. The taxes payable to the state, and the conditions of land ownership are given. The proprotion of the produce to be enjoyed by the cultivator and the state is specifically mentioned.

So far as territorial divisions are concerned large areas corresponding to our modern Presidencies are, known as deśa. In North Indian inscriptions the deśa wasidivided intap bhuktis, bhuktis subdivided into visayas. In South India in the Tamil area valanädu, nādu, kotham, ür were the territorial divisions. Large units were known by the name of manialam, pädi, or vädi in the Tamil and Canarese areas. We have such names asColamaņḍalam, Toṇ̣damaṇ̣alam, Gangavãḍi, Raţtappādi, Perumbānapppāḍi, Nulambapādi Sometines there are territorial divisions based on the nane of the adjoining hills as, for instance, Ballamkonda, Tirumalai, Venkundram,etc. Such territorial divisions as Vadabalavalinädu and Vadavalinādu show that their boundarios werw hith roads known by those names. Similarly, the banks of rivers also formed boundaries. In the Cola period many of the Valanädus were named after the kinz as Armolivalanädn, or after some branch of art or culture, like Nityavinodavalanãḍu.

Of the oflioess under the king the in-criptinis give : lesgthy ! $1 \cdot$ - . At the royal court were the Sacivas, Amãtyas, Pradlianāmōtyce: the mportant :ninisters, Mahädanda-
 in charge of cavalry atd el phatry corps w-lo Asvazatis ned l'ilupatis. Bhuktis were underUparikas, and $V$ ispayas under Vigayapatio or $V$ iṣayamuhiatiaras. Other subordinate revenuẹ officers like Ayuktas, Vyäprtas, Adhikrtbs, sro also knuwt.. Cülas and Bhatas were eskin to
police officials. Among judicial officers are the Nayädhikaranas and the Dharmädhikaranas. All these designations occur mostly in North Indian records. In the Hirahadagalli plates of Pallava Sivaskandavarman, Amälyas are mentioned but, in lnter Pallava inscriptions, Mätras are mentioned. They correspond to the Mauryan Mahämätrus. In the Prakrit, charters of the Pallavas the names of a number of officers are given like Vallava. Cocalluta, Rahasyädhikyta. It is believed that Väyilkeḷpär mentioned in the Kasākudi plates were secretaries and the Kośädhyakba is the officer in charge of the treasury. The adhikarunadaṇda mentioned in the Kasākudi plates should mean the fine imposed by the law courts. Among the officers in close attendance on the king are the Tirumandiravolai, and Tirwaikelri who took down the orders of the king and carefolly listened to his utterances.

The inscriptions give us an insight into the extent of Indian influence, cultural, maritime and military in surh distant islands as Java. Sumatra. Borneo, Malaya, Annam, Burma, Ceylon, Laccadives. Maldives and other islands in the Indian Ocean. The various places mentioned in the inscriptions of Räjarāja and Rājendra in many cases still remain a puzzle, though the efforts of scholars have helped us greatly in understandidg the naval conquest of these mighty kings beyond the seas. Rajendra's overseas campaign is graphically des: cribed in the Tamil prasjsti: :" (Vho) having despatched many ships in the midst of the rolling sea and having caught Siaurāma-vijayottungavarman, the king of Kadâram. togethet with the elephants in his glorions arny (took) the large heap of treasuries. which (that king) had rightfully accumulated: (captured) with noise the (arch called) Vidyädharutorunu at the war-gate of hisextensivecity : Sri Vijaya with the 'jewelled wicket-gate' adomed with great splendour and the gate of large jewels ; Pannai with water in its bathing ghats; the ancient Malaiyūr with the strong mountain for its rampart ; Māyirudingam surrounded by the deep sea (as) by a moat ; Ilangāsōka (i.e, Lankās̃ōka) undaunted (in) fierce battles ; Māpappālam baving abundant (deep) water as defence; Mevilimbangam, having fine walls as defence; Valaippandūru having vilappandūru(?) Talaittakkolam praised by great men (versed in) in the sciences ; Mādamālingam, firm in great and fierce battles; Haāmuridésam, whose fierce strength rose in war ; Mãnakkavãram, in whose extensive flower gardens honey was collecting; and Kadãran, of fierce strength which was protected by the deep sea." (S. Ind. Inscr. II, p. 109). Though the task of identification of the places mentioned in Rajjendra'sinscriptions was undertaken quite a long time ago by Hultzsch, even in the time of Venkayya the identification progrossed only to the extent of correctly understanding Nakkavaram as Nocobar Islands and E'appalam as a port in Burma. The efforts of Coedes to understand the various places have given the most intelligible account of Räjendra's campaign and place names like Măyirndiagam, Ilangā́sokam, Talaitakkolam, Mâdamālingam, Iñ̆muridesam, ete., should be located in the Maldyan Penisula and Sumatra. From the inscriptions we learn that Sangrāma Vijayottungavarman of the Sailendra dynasty of Srivijaya acknowledged the suzerainty of the Cola emperor. The larger Leyden grant refers to the construetiost
-
of the Cōdâmanivihāra at Negapatam by Māra Vijayottungavarman and shows the relationehip between India, Sumatra and Java.

From inscriptions we learn of the prosperity of the land through trade with other countries. During the time of the mighty emperor Rajendracola, who converted the Baby of Bengal into a 'Cola lake,' trade flourished and we find inscriptions of merchants from hue realin in distant islands like Sumatra (An. Rep.S. Ind. Epigraph, 92 II). The tax levied on merchandise according to the unit of ship in terms of Gadyana coins is mentisned in a Rāștrakūṭa inscriptions (Epigraph Ind. III p. 301). Similar tax known as Küpaśulka waa levied on commodities taken overseas and this we learn from a Käkatǐa inscription (AnRep. S. Ind. Epigrnph, 10, 45).

We know from literature that from the earlicst times there used to be very active maritime fntercourse between India and various other countries. The Baveru jātaka is an instance. Important posts were at Bharnkaccha, Sorpãraga, Kã veripūmpaṭtaṇam, etc. In early Sangam literature the last mentioned figures prominently. The Alvärs mention the seaport of Mahābalipuram as Kadalmallai. Masulipatam was a great seaport about the introducing of the Christian era, Herengain the inscriptious render invaluable service in beginning to us various places to which ourancient sailors resorted both with merchandise and colonists.

The sixth century Sanskrit inscription of Rudravarman Irom Fu-nan Kamboja and fom of Pürnavarman from West Java show ham Himlu dingtoms were established in these distant lamis. Similarly the Hindu kingdom of Sivijaya was fomded in Sumatra. The Sanskrit Y"pet inscriptions of about the ath century 1.1, nentioning the sacrifices performed by Mulavarman graphically describing the large quatity of gold expended by the king in the performance of the great sacritice known as Buhusurarna giving away twenty thoueand oows as daksinä at Vaprakeśsara show she doep-rooted nature of Hindu thought and culture in the Island. In the words of Majundar " the inscriptions discovered at Botneo, Java. Annam, Cambodia and Malay l'enisula lead inevitably to the conelusion that the language, literature, religion and polition and social institutions in India made a thorough conquest of these far-off lands, and to a gleat extent. eliminated or absorbed the native elements in these respects." Chhabra's illuminating paper on the cultural expansion in South India during the Pallava rule gives a vivid picture of 1 lis aspect.

The religion, whether Brahmanical or Buddhi-1, int thes islands came from India and
 of the different mürtis have Indian influencs. The Rinnityrnu is represented in exquisite
 image comes from Java and is now preserved in the Leynom M1scum. Sanskrit language aid literature being highly cultivated, the fangan- it the inscriphe ns is flawless Sanekrit. 2te ecript u* if for the inscriptions is also bertomintom India.

The inscriptions reveal to us the personality of our greatest rulers. The Nāsik inscription of Balasiri, the plaintive cry of a sorrowing mother recounting the noble qualities of a worthy son and sovereign, presents an excellent picture of the personality of Gautamiputra Sãtakarni, the great Sātavāhana ruler. His face resembled the full moon. His long and shapely arm resembled the stately form of the lord of serpents. He had the charm of the lotus flower fully opened by the rays of the sun. He allayed the tears of anyone who sought his protection. His orders were obeyed by all kings with great respect. He was the very pink of courtesy and most devoted to his mother. He shared the pleasures of his subjects and sympathised with them in their woes. He always spared the life of even the most troublesome enemy as he could not bear unnecessary shedding of blood. He promoted the families of the twice-born and the lowly. He established by practice and precept righteous conduct. In this inscription he is described as 'the only bow-man,' 'Ekadhanudhara' and on his coin this epithet has been symbolised by a strung bow shown on the obverse.

The Allahabad pillarinscription describes Samudragupta a great ruler, a great general, a great scholar and a great musician. The graphic description of his musical talents in the inscription is actually given realistic shape on the obverse of his lyrist type of coins where the king is shown seated on couch, playing the Viñā resting on his lap.

The personality of Māhaksatrapa Rudradāman is again clearly revealed in the Junāgadh inscription. His brith in the lap of fortune and power, his comely appearance, his excentional capacity in battle, his special training in statecraft, his knowledge of the different sciences aud arts including grammar, music and logic, the fabulous wealth in his treasury overflowing with gold, silver, diamonds and gems but all the wealth rightfully obtained, present him as an exceptionally fortunate and brilliant prince. No wonder that as the inscriptions mention he was wreathed with many garlands at different svayamvaras by the daughters of many kings. His personal beauty and even the sweetness of his voice and the lovely navure of his gat are specifically mentioned in the inscription,

The personality of Asoka is revealed in his inscriptions. Their language is simple and the picture presented is quite clear. We have here the greatest of Indian emperors speaking to his subjects as to his children. How often has he not repeated that this should be done and not something else? The broad sympathies, clear-cut views, tolērant vision, and quaint simplicity, of a powerful emperor are at once gident in his edicts. His feeling neart is revealed in his sorrow over the huge killing and bloodshed in the Kalinga war. His utter disrogatd for personal comfort and the one desire to be of the utmost help to his: subjects-his subjects he regarded as his own children and he was in the true sense a Rājā by prakitiranjana, his subjects being his Prajä in the literal sense-is evident from one of his edicts where he mentions that there is no fixed time for interviewing him but any affair of: state could be brought to him for disposal whether he was in the dining chamber or in the: harem or in the cowshed or in the palanquin or in the pleasure garden. We are reminded:
how similarly Rãjendra, the Cola emperor, also heard cases and issued orders to his officers even when he was in the dining hall. Assoka's child-like simplicity is revealed in his plain statement of facts about ration in his kitchen. The slaughter of animals and fowl which was originally done on a large scale was reduced to that of a single deer as he had almost tabooed venison; peacock killing was reduced to the minimum, only two being allowed at the time the edict was incised; and the emperor declared his wish that he would give up even this. We can imagine what a sacrifice this is on the part of the king if we read the Sunlarakānda of the Rämãyana where the different viands and liquors are graphically described in Rāvañ's kitchenalmost causing the mouth of those accustomed to these to water; and how praiseworthy for one accustomed to luxuries to voluntarily lead the simple life of wmost an anchorite. Asoka's inscriptions refer to certain administrative innovations carried out by the emperor to improve the prevailing state of affairs. Dharmamahämätras who did not exist before were appointed by Aśoka for the propagation of piety. Never in the past have officers called Aiälūmätrus of morality (Dhammamahamata) existed, but now Aśoks created them since it was his intense desire to see that virtue was practised. Though the emperor knew of the various traditional auspicious creremonies performed during marriage child-birth, etc., he regarded most of them as useless and favoured only such ceremonies as would bear good fruit, like courtesy to slaves, reverence to elders, gentleness to animals and liberality to Sramapasiand Brāhmagas. Asoka deplores that people are prone to recount only their virtuous deed, but not their evil performances. So he puts forth a strong plea for avoiding sin and practising merit. In the past kings went on pleasure tours, but Asoka went only on tours of morality. His deep concern for the welfare of man and beast is evident in the arrangements made by him to plant banian trees and mango groves to afford shade, to dig wells at intervals with flights of steps for drinking water and to build numerous rest-houses and hospitals both for men and animals. The inscriptions of Asoka describe the emperor's missionary notivity and efforts to propagate ideas of dharma and social service not only within India but fur outside its borders, in the kingdoms of Ptolomy If Philadelphna of Egypt, Antogonus, Conatas of Macerlonia, Magas of Syrini and Alexander of either Epirus or Corinth (Tulamayit, Antekina, Maka and Alikasudara) even at the risk of being ridiculed as a madideali. In the inscription of Gautamiputra Satakarpi it has been stated that the emperor identified himeell with it-anhjects in their sorrows and joys; Skandagupta is described in the Jnnagnd i, enfptine as making his jeople happy by sweet talk prefaced by smiles, courtest. Hownt sull lihorality. In one of his inscriptions Asoka expresses himself as whe fory of his onhjocts, in whose welfare and happiness he is interested as in that of lio wir mikirew, atel lhat not only in this world but also in the oilher. But he was not matistial withthe happir zof his own subjects; he extends his desire for this happiness beyond hia domunnoas and expresses his anxiety for the increased joy of peopletbeyond his dominions whom also he considers as his own children. It is for this purpose that he mode araangements for transeribing his edicts even beyond his domain and auranged that his Mahamaitas maysirive to inspire confidence and induce the borderers to praetise meritorious deeds.

A great contemporary of the Śunga, Puşyamitra, and S̄ātakarṇi, the powerful Sãtavãhana sovereign, was Khāravela, the greatest king of Kalinga. A complete picture of this great ruler is presented in the Hathigumpha inscription where all his exploits year after year are stated with precision. His own personal talents and learning in various sciences and arts are also mentioned. From this inscription we gather how he repaired the gates and ramparts of his city, erected embankments to several tanks including the lake Khivira, at a very great cost, built a royal residence called the Mahävijayapräsäda or the palace of great victory with the riches brought from Anga and Magadha. He built excellent towers with their interiors decorated with sculpture and painting. The amenities provided by him in his realm are also mentioned. He caused festivities and samija assemblies to be held to entertain his people with dance, drama and music, vocal and instrumental. He constructed rest houses remitted many taxes, bestowed several previleges on the corporations both urban and rural (Paura and Jänapada). He celebrated the famous Räjasüya sacritice by establishing his might with his army. His religious bent of mind is revealed in all that he did for the Jaina religoon onthe Kumari hill in the nature of amenities and offerings for the ascetrics and sages following the dharma of Arhat. With all he was a tolerant monarch as is evident from his attitude to the Brāhmanas. He was a great King of Peace, King of Prosperity, King of Monks, and King of Religion who had seen, heard and realised blessings (Valyänu).

The mighty ruler Rājarāja and his son Rājendra did not have the good fortune to ic visited by foreign travellers to leave grand accounts of the noble, awe-inspiring royal courts palaces and temples as in the time of Krṣnadevaraya. All that we know of the Cola emperors is mainly from theirinscriptions, which, however, give ample material for the understanding of their personality. History has no greater instance of a pious queen than the saintly Sembianmā-devi, the consort of Ganḍarāditya who was widowed at a tender age with a bake it her urms ; and many indeed are the temples in the Cola realm that have been endowed by this queen whose every wish Rājarāja, her grand-nephew, respected. The Tiruvālangadu inscription specially mentions that though the people chose the heir-apparent Rājaräja to be their king he would not consider the throne when his uncle Uttamacola had not eujoyed it. Räjarāja's might, conquests, administrative machinery, fabulous wealth, un paralleded liberality, in short, all the pomp and splendour of the great Cola empire in the building of which he had such an important hand before his son extended it further, is all revealed in minute detail in the long inscriptions from the Bṛhadiśvara temple at Tanjore. The campaing» of Rājendra Coḷa described at such length and with such a wealth of detail in his prasastio are rittingly celebrated by the erection of a novel jayastambha, in this casea jalastambha of the most sacred water on earth. He emulated Bhagiratha and in fact the tribute helevied from shose whom he overcame in the region of the Ganges was only the water of the holy river to be carried to his realm to be emptied in the mighty tank near the huge temple of Siva at a new capital for his empire that he constructed and named Gangaikondacholapuram to commemorate the great event. The conquest of Rājendra mentioned
in his inscriptions and its consequence are confirmed by a Gāhaḍavāla inscription at Gangakondacholapuram wherein the usual preamble of the Cola inscriptions preceds its own indioating in unequivocal manner the suzerainty of the Cola emperor years later. The Dvãrapälaka from Kalyãnapura in the Dārāsuram temple and the few Kalinga and Päla images found scatterred in these Coḷa temples are additional evidences of Colla military triumph but it is the inscriptions that give a clearer written record of victory.

Sometimes it is not merely the personality of the ruler that is revealed in the inscriptions but occasional light is thrown on the exigencies of social life as in the case of a Brähmaña who turns into a warrior. A remarakble statement with a wealth of detail is in the Täla gunda inscription of Kākusthavarman where the progenitor of the Kadamba family Mayoura sarman is described as a student come to Kãñci for his Vedic studies who on being insulted by the soldiers in the cavalry of the Pallava king, could not brook it and, in the words of the inscription, with the hand that was accustomed to hold the kusa grass, fuel, stones, ladle, melted butter and the oblation vessel, he grasped a flamming sword to conquer the earth and so continues the inscription to narrate how the successors of Mayürasarman went from strength to strength and the family where the hair was wet with the holy water of the purificatory rites of different sacrifices, deeply learned in the sacred lore, that kindled the fire and drank the Soma, in the interior of whose houses loudly resounded the chants of the Veda and the Vedānga, and that tended a Kadamba tree with blooming flowers near their dwelling turned into a house of Ksatriya kings and one of the daughters of the family, married into the imperial house of the Guptas.

The Mandagapattin inscription is another epigraphical curio. This is a joyous exela. mation of a king taking delight in inventing something novel, different from existingthings Hitherto constructions gencrally were of brick, timber, lime and metal but now this omiousminded king-the king actually describes himself so-excavated cave temples with no carved panels out of the living rock. This is the origin of the numerous early Pallava tmpples in the Tamil area about the beginning of the 7th century A.D.

Life is short and uncertain, wealth is fleeting in nature ; and the ruletof today is the begger of the morrow. It is not always that the surface of the stream of life is unrumed. Great men have adversities. In the Bhitari pillar inscription of Skandagupta there is a statement of great significance. The inscription says that in preparing himself to restore the fallen fortmes of his family it whole night was spent by the emperor on no other couch except the bave earth.

Sometimes there is a dramatic effect in the narration in an inscription. In the same Bhitari inscription it is stated that with the cry, ' Victory has been achieved ' Kurnaragupta rushed to his mother whosc oycs were wet with tears of joy, like Krṣna going to his mother

Devaki after slaying his enemies. The glorious king Isãnavarman wedded to heroism and truth though fully favoured by fortune resorted to Prayăga and there, decorated with flowers entered a fire kindled with dry cow-dung cakes as if it were water for a bath and put an end to his life. This is in accordance with the belief that voluntary death at Prayăga assures heaven as Kälidāsa says Tanutyajām nästi sarirabandhah. Another instance like this, known through epigraphy is the death of Calukya Āhavamalla Somésvara II, the father of Vikramaditya VI who being the victim of a malignant fever put an end to his life in the Sangama of Tungabhadrä followed by his devoted queens and against the wishes of his loving, tearstained subjects who followed him to prevent the mishap.

We may have heard of fabulous stories of extraordinary wealth and gifts and charities beyond all conceivable limits of liberality. A story narrates how Anāthapinḍada spread the whole surface of Jetavana garden with gold coins, purchased it at that price, and presented it with a newly built monastery to the Enlightened One. It is in the Nänăghat inscription of Śãtakarni and the inscription of Usavadāta at Nãsik that we get a staggering account -of the generous impulses in a man. Possession of wealth is one thing and natural liberality another. - The Nandas were fabulously rich but we do not know of any gifts made by them. Śátakarni in performing the Aśvamedha twice, Gavāmayana, Agnyädheya, Räjasãya, Aptor$y \bar{a} m a$ and other sacrifices, gave liberal daksinā or sacrificial fee consisting of villages $k \bar{a} r s ̣ a \bar{a}-$ panas, cows, elephants, horses, horse-chariots, silver pots, dresses, and so on. Khãravela. his contemporary, was equally munificent. He even made the gift of the golden Kalpataru. But these are specific sacrificial gifts. The long catalogue of meritoriuos deeds of Usavadāta is more interesting. He was the donor of three hundred thousand cows, performer of sacred gifts of gold on the river Bärnäsa, giver of sixteen villages to the gods and Brähmanas, host, all the year round, of a hundred thousand Brähmanas, giver of eight wives to Brāhmañas in the sacred place Prabhāsa, donor of quadrangular hermitages, dwellings and shelter houses at Bhārugacha, Dasapura, Govardhana and sorpāraga, maker of pleassaunces, tanks, and wells, founder of free ferries by boats on the Ibă, Păradā, Damanā, Tāpi, Karabenā, and Dahanukã.

If occasionally we have here and there a portrait sculpture of some great ruler, it is also sometimes accompanied by his consort or consorts. The Pallava royal portrait sculptures are famous. In the lovely painting fragment of Mahendravarman at Sittannavāfal there is the lovely face of his queen beside him. Even here epigraphy supplies its own quota to the pictures that we have of great kings and queens. We have considered kings. A single instance of a queen would suffice. The favourite queen of Rājasimha, the Pallava king whin constructed the Kailāşanātha temple, was Rangapatākăa who, according to the inscription in that temple, was a patüküu (bamer) as it were among women. She is described further as ' full of loveliness, sharpness, grace and cleanliness, who seemed to be the master-piece of the Creator, whose skill had at last attained perfection after He had created thousands of good-looking women, she who was charming through gennine sweetness who was adorned with grace, coquetry and feeling . . . . etc.'

The infinite value of epigraphy in the understanding of the ancient arts like dance and music is amply illustrated in the musical inscriptions of the Pallavas and the labelled dance poses from the gopura of the temple at Chidambaram. The Kudimiyãmalai musical inscription and a similar one from Tirumaiyam are extremely valuable as they record the musical notes as understood and practised during the time of the Pallavas. Similarly the use of the term Pariveidini in the inscription shows that the early type of vinä was still in use in the seventh century. And this is confirmed by a sculpture from the Dacca. Museum where Sarasvati, the consort of Viṣnu, represented on Garuda carries the lyre type of viña. The labelled sculptured panels representing the different sthänas and karanas given in Bharata's Nätyaéästra are the most elaborate commentary and most intelligible, probably more so than even the learned explanation of the texts by Abhinavagupta. This visual expalnation is aided by the presence of the labels which are short inscriptions describing the sthanas (dance poses). And about these representations being the most correct there can be no two opinions as the Cola period undoubtedly was the time when the glory of dance was at its zenith, the emperors being great patrons of this art as gat hered from the inscriptions.

The presence of inscriptions along with sculpt ure either to explain the carving or to mention a gift and the name of the donor is the most valuable clue to understanding its date, the circumstances under which it came into beng. and the theme of the carving itself. It is the presence of the inscriptions, labels explaining the pancls and carvings at Bharhut, that has helped a correct understanding of this important monument. Without the label how could we know whether the image was intended to represent Sirimā or Culakokã or Sudarsana? It is the presence of a single line of inscription in an early sculpture from Amaravati that has proved beyond doubt that Yaksa worship prevailed in the Krishna valley and was a feature as much of South India as of the North. Images dated on stylistic grounds independently can have their dates verified and checked with the help of such images as bear inscriptions on their pedestals, with dates, if any: But even if the dates were absent, the palaeography of the inscription would itself help considerably in the proper dating of the figure. Sometimes even though identification of panels containing stories from the Jātakas and Avadãnas is not impossible the inscriptions below vouch for the correctness of the identification. Sometimes it so happens that there is not sufficient literary material to throw light on the sculptured theme, in which case the label becomes absolutely valuable. If the Pallava inscriptions give long lists of the royal house the sculptures of the Vaikuñthanātha temple at Kãñchipuram present a more graphicpicture of the rise and growth of the dynasty. Here again it is the presence of a few inscribed labels that has nelped the scholars to proceed and progress along the correct path of identification with the clne obtained therefrom.

Again, without the help of inscriptions we cannot understand who executed the carvings how, and at whose instance. Mostly it is the name of the donor that is given. If the carving is a religious gift it is so stated. Occasionally the name of the sculptor is also given. This is not only in the case of a sculpture as such but also in the case of any part of a sculpture for
which the donor is responsible. Such donative inscriptions abound in the early stūpas where a cross-bar or two, an upright or coping piece from a rail, a casing slab or a dharmacakra or a puina-qhata is presented by a perfumer or a cobbler or a musician or a trader or a leader of a caravan of merchants, a lay sister or a monk or a house-holder with brothers, sisters, sons, daughters, daughters-in-law and other relations and friends. Sometimes we hear that a guild of workmen completed a particular part of a building as, for instance, is given in an inscription at Sanci that one of the torana gateways was carved by the ivory carvers of Vidiśa and the fine workmanship is an enlarged version of the usual delicate work of the ivory-carvers. From these inscriptions we gather information'also about the different places from which such pious pilgrims came, e.g., at Amaravati we hear of people coming from distant places like Pātaliputra. Rājagiri and Simhagiri. The occurrence of the carved moon-stones near the gateway entrances of the stupas and monasteries at Nägarjunakonda which points to Ceylonese influence is amply testifed by the inscription found in the place.

However graphic may be the description of a battle-and we have one of the most picturesque descriptions of a battle in the Kûram grant of Parameśvaravarman-historians are bound to view with suspicion any account of large-scale conquest. But the prominent presence of an inscription in the vanquished ruler's city to announce the shame of defeat of the king is evidence not to be lightly brushed aside. The presence of the inscription of the victorious Western Cālukyan Vikramāditya in the Kailāsnnātha temple at Kãñeipuram, the capital of the Pallavas, and similarly of Narasimhavarman proclaiming his victory prominently at Bādāmi itself, the capital of the early' Western Cālukya, is a more important and more emphastic assertion of the conquest of both than in any of their other inscriptions, however forcefully put. On such occasions the scribes and stone cutters follow their royal patrons and inscriptions are incised to commemorate their victories or donations in a language and script totally different from those of the area concerned. Räjendra's victorious praśastis in Kalinga or in the Cablukyan area, Narasimbavarman's inscription in Granthan Vātâpi sre instances. Similarly the occurrence of Tamil inscriptions in distant islands like Sumatra where the language is totally unknown, and the presence of the Gähadavál inscription at Gangakondacholapuram have all their own story to tell.

Numismatics is no doubt an important source in understanding the true history of the land, but the coins themselves to be understood require the help of epigraphy. This depens dance on epigraphy is not in any small measure when we remember that sometimes the legends on coins are sufficiently lengthy. It is only by a study of the different scripts that one can muravel the mysteries of coin legends which are as numerous and varied as the scripts themselves. Sometimes it is only the coins that reveal the use of a particular script is an area in asubsidiary fashion alongside of a main script used for inscriptions. As example, may be cited the Cola coins of Uttama, Rājarāja and Rājendra and a Kerala coin of Śri Virakerala wherein Nāgarì is used for the legends, though we know of no inscription in Nagarí issued by these kings, the script used being invariably Grantha, Tamil or Vatteluttu.

So far we have considered the need for studying inscriptions and what the inscriptions, reveal to us. There is probably no field of knowledge that does not come within the scope of inscriptions, after all, inscriptions are only permanent documents recording the life and happenings oftheir time with special reference to the king and his relationship with his people.

But to study and understand these inscriptions which differ from area to area and age to age in the type of script and language used, knowledge of palaeography is essential. Palaeography being the subject dealing with scripts, a study of this reveals how scripts came into being, developed and changed during the centuries. In the subject of epigraphy palaeography comes in as the most important limb. The age of the inscriptions, the growth of language, the literary beauty of the language-all these come only next in importance. In the following pages the essential features of the Indian epigraphy with special reference to South India and her scripts have been discussed.

## DOCUMENT.

A document is engraved on a tablet or a metal plate which is usually shaped after a simipler original-a leaf or bark. In sculptures we find figures carrying these documente of bark or leaf in their hands. This is the usual thing in the case of all divinities presiding over learning and great masters profound in their knowledge of the essentials of wisdom. Brahma, the Lord of Learning is always represented in soulpture with a book in his left hand. A good early example of this may be seen in the representation of the deity at Aihole and Badami to which Buhler (Ind. Ant. XXXIII, p. I) has drawn attention ; a still better example is the Gupta-Maitraka sculpture from the Ardhanãrífvara panel at the Elephanta cave, near Bombay (Fig. 1). His spouse Sarasvati carries a book similarly as she presides over

learning more particularly over the secular and artistic side than her four-faced lord whosevery breath is of the essence of the four Vedas which are chanted by an equal number of mouths. The earliest example of Sarasvati yet found in India is a headless image of the deity from Mathura with an inscription on pedestal of about the beginning of the Christian ea. In her left hand she holds a book composed of palm-leaves or cut birch bark tied together with string (Fig. 2). Siva as a teacher of the universe, the teacher par excellence whose disciples

c. S. del.

He. 2.
are sages ripe in years and wisdom, holds a book in the same manner. One of the early examples of Vishnu in this form is in a panel from the Gupta temple at Deogarh (Fig. 3).

na. 2.

His right hand is in the vyäkhyänamudră or in the attitude of elucidation. These two hands and their attitude are noteworthy as the vyäkhyänamudrä occurs also in the case of the greatest of Indian masters, the Buddha. The dharmacakrapravartana, the setting in motion of the wheel of dharma or the first sermon on dharma of Buddha is suggested by the $m u d r a ̄$ of his hands styled dharmacakrapravartanamudrä. In most representations, one end of his cloak is caught by Buddha in his left hand while the other is raised. The end of the cloak resembles a small book and this is very suggestive (Fig. 4). Mānikksväcaka, the great scholar devotee of Siva from South India, is always represented in sculpture

ma. 4.
o.S. del.
carrying a book in his left hand and in one of the bronzes of his has actually a verse from one of his works inscribed on the leaf in letters of the late Coḷa period (Fig. 5). One of the finest soulptures in Ceylon is the sage holding a book in both his hands (Fig. 6). This is differently interpreted by different soholars as Agastya, Tiruvalluvar and Parākramabāhu, a king of Ceylon. However it may be, it is undoubtedly an early representation of a great scholar. In the early Cola painting representing Śiva disguised as the old man come to fetch Sundaramûrti, he is represented as carrying an umbrella in one hand and a palm-leaf document in the other.

The very name of a document, patra suggests its origin. The earliest material used for writing was the leaf. It may have been tälapatra or bhürjzatra out to proper shape,

O.S. del.

FIG. 5 ,


He. 6 .
the former being popular in the Deccan and the latter in North India. A page is also connoted by the same ierm. The term panna occurs in Buddhist literature and writing on a leaf is often referred to in the Jätakas (II, p. 122 ; IV, p. 35 ; VI 204). The antiquity of the palm leaf as writing material has been well established by Bühler, who cites (a) Huien Tsang (seventh century A.D.), an eye witness for its use, (b) some fragments of palm manuscripts of the Godfrey collection of the fourth century A.D. and early copper-plates of about the Christian era modelled after-palm-leaf, and (c) Buddhist traditions that the canon was written on palm leaves at the first Council soon after Buddha's death (Bühler, Appendix to Ind. Ant. XXXIII, p. 94). The terms grantha and prabandha suggest a book composed of a number of leaves properly arranged and tied together. The words kānda, sarga and patala, terms for portions of a work, also convey this sense.

The word olai in Tamil is significant in this connection as it specifically means the palmleaf used for writing. The calendar carried by the astrologer who is an adjunct to temples is referred to a Nalolai in inscriptions (S. Ind. Inscr. III, p. 321). A document is styled

Arai-olai (Ibid. pp. 163 and 275) and the officers who noted the oral orders of the sovereign were called Mandira volai and Olainäyagan all based on the palm-leaf used for writing. There is an interesting statement in an inscription how actually the king graciously ordered that his instructions may be entered into accounts and the order was written by the Mandiravolai and issued with the signatures of the Olainäyakam officers (Ibid. p. 312). The process of writing itself is described as variyilittu, i.e., putting in lines. The process of transferring the royal command, first copied on palm-leaf, to more permanent material, like stone, is picturesquely described in an inscription from Tiruvälangädu, where the personality of the great emperor Rājendracola, who allowed his officials to bother him even at such odd hours as when he was engaged in dining, recalls the magnanimous spirit of Asoka, who similarly allowed himself to be disturbed at all hours. The emperor while dining in his day residence at Śivapuri being informed by one of his officials that twentyfive families may be settled on the land in the village to be called Räjendracolappädi to supply oil to the deity at Tiruvālangädu granted the wish and the order was received with the signature of the royal secretary (Tirumandiravolai) and conveyed to the magistrate who ordered it to be engraved on stone to prevent any one from disobeying the royal order (Ibid. p. 136).

Another term for a document is lekha which is derived from the root likh, to write. The term lipi is also used and a well-known instance is the dhamma-lipi of the emperor Asokaइयं धम्मलिपि लिखाषिता, i.e., this moral treatise or document has been incised. The term likhäpitä suggests the incising of the letters and the word lipi suggests the painting of the letters. The use of the term lelha also suggests the transferring of the document, drafted in ink or masi from a less permanent material as was obviously used for such purposes to a more permanent medium like a stone tablet in imperishable incised letters.

Copper plate grants that are found in such large numbers all over India are copies of originals from the royal archives or from those of the nobles. They were intended for the donees who kept them carefully to establish their right to the gifted land or other property. Elaborate descriptions there are of how a king made a gift. The king with his hand purified by the touch of the cow's ear and kusa-grass poured water and made the gift with the words that it may last for ever गोकर्ण कुहलतापूतकरतिलोदकपूर्वमाचन्द्राक याबत् शासनीकृत्य प्रदत्त : (Epigraph. Ind. XIII, p. 297). The recording of the facts of the gift are also expressly maintained, sometimes even the metal composing the charter being alluded to (Ibid. VIII p. 142 ; XV, p. 143, III, p. 353). That the charter was intended for establishing claims by exhibiting it is also made clear in some inscriptions (Ibid. VI, p. 142). The giving of the charter itself is sometimes recorded in it as in the Mayidavolu plates (Ibid. VI, p. 88).

As already pointed out, the commands of the king were recorded on leaf or birch bark by a keeper of records like the Ãksapafalika or Divirapati according to the instructions of the messenger (Dütaka) usually the minister, Pramätr or Mahäsädhivigrahika or Rahasika, who conveyed it to him (Ibid I, 318; p. 73; p. 88 ; p. 9.) . and passed on to the engraver.

Bignature,
The final stamp of authority was with the affixing of the signature and seal. The former was usually done by expressing the name of the king prefixed by the phrase Svahasto mamaA classical example of this is the signature of Śri.Harṣavardhana (Fig. 7). It is easily


FIG. 7.
O.S. del. the best preserved, highly florid and most artistically drawn royal signature yet found in India. It has led one of the scholars in the epigraphical field to wonder how the king could find time in the midst of his military conquests and administrative and literary activities for such florid signatures to be affixed to documents. In Telugu grants, the name of the king was suffixed by the term Vrälu meaning 'signature,' as in Singãnäyänivrälu (Fig. 8) or some-


FIG. 8.
C.S. del.
times the word ' signature of' was omitted and merely the name of the king was given as in Vijayanagara grants. In the Vijayanagara grants, it was however only sometimes that the king's name was given, as for instance, Śri Harihara (Fig. 9) but sometimes the name of the


FIG. 9.
O.S. dob.
great deity of the principal temple at Hampi Srii Virūpāksa was put downinstead, suggesting that the king was acting on behalf of the Lord himself. There are many instances of the king's name with the word Svahasto mama like that of Bhoja of Dhärā-Svahastoyam Śri Bhojadevasya (Tbid. XI, p. 182). Sometimes it was onıy the king's name as Śri Mülaräjasya (Ibid. X, p. 79) or sometimes merely Svahasto mama (Ibid. I, p. 88) which was felt sufficient as the seal was also given.

Fig. 7. स्वहस्तो मम महाराजाधिराजश्रीहर्थस्य


Fig. 9.- \$పాిార

Seal.
The seal affixed to a document was considered the most important element to proclaim its validity and the dharmasãtras demand its use. In the drama Mudrãrãksasa Räksasa, the minister of the Nandas, wonders whether he can deny the validity of a document bearing his own seal, although he was not responsible for its issue (लेखोsयं न ममेति नोत्तरमिदं मुद्रा मदीया यत :-Mudräräksasa $\mathrm{V}, 18$ ). So the seal counted for everything as in the Rämäyaṇa, Sitā trusts Hanumãn as Rāma's mpssenger only on the presentation of the signet ring of Rāma with his name engraved on it विशवासारं तवानीतं तेन दत्तं ह्मनिन्दिते । रामनामाध्रूतं चेदं पइयदेव्य ््भुलीयकम (Rämãyana) V, 36, 2). The signet ring was sometimes the seal itself but often there were separate larger seals. India abounds in seals of various types found all over the land. There are private seals, seals of guilds, seals of high officials and dignitaries, noblemen, seals of generals, ministers, royal seals including those of princes ; there are also seals of institutions like the Vihära of Nālandā, religious and votive seals with such legends as the usual Buddhist creed ' Ye dharmä, etc.' The earliest seals in India from Mohenjo-daro are not yet understood as their script has not yet been deciphered. The scheme of representing a motif like an animal or some object of importance together with a legend is, however, found repeated in later seals as well. Even in coins, the same method has been adopted.

In Samudragupta's Allahabad inscription, the respectful offerings of seals with the mark of Garuda from his numerous Sämantas is specially mentioned. An example of the Gupta royal seal is also given (Fleet, C. Inscr. Ind. III, pl. XXXVII). The royal seal was usually a model of fine workmanship. The seal of Sarvavarman Maukhari is an example of fine artistic work (Ibid, pl. XXX). The bull, the länchana of this house, is very well represented. Similarly the bull is found on the seal of Maitraka Bhatärka (Ibid, XXIV and on the Sonpat seal of Harṣavardhana (Ibid, pl. XXXII). The Varäha was the läñchana for a number of dynasties ; the Western Cälukyas, the Käkatiyas after them and the Vijayanagara rulers still later. The elephant adorned the seal of the Western Ganga while the bull was chosen by the Eastern Gangas. The bull also adorned the Pallava seal. The tiger was the emblem of the Colas and it was placed as suzerain over the fish and bow emblems respectively of the Pāndyas and Ceras, the royal umbrella and chauris being shown above the tiger suggesting overlordship. Similarly in the case of the Varäha signifying the royal house of the Càlukyas the various Räja-cihnas or the royal emblems like the parasol, chauris, auspicious lamps, conch, lotus were shown. The conch and lotus signify the nidhis (kosa) of the king, the umbrella and chauris power, and the ankusa and spear danda or military strength, the lamps the brilliance of the king, and the sunfand moon the glory of the house till eternity (i.e., till the sun and moon last). These emblems of the king are actually enumerated in some of the Eastern Ganga grants, the conch, golden chauri, white umbrella, bull emblem, etc.
 (Epigraph. 1nd. IV, p. 189). The seal of the Pāla kings of Bengal is a beautiful representation of the tirst sermon of Buddha suggested by Dharmacakra flanked by deer.

Apart from the emblems there are legends sometimes long, sometimes short. The name of the king and the dynasty and sometimes the pedigree are given. An example of the legend on Vākātaka seals is given in Fig. 10. The legend from the closing portion of an inscription of Rājarāja (Fig. 11)

C.S. del.

Fig. 10.
is also the type of legend occurring on a seal as may be seen on that of Rajjendra's


Fig. 11.

Tiruvālangādu plates (pl.II-a). Another example of a legend is from a Kalinga seal (Fig.12).
Fig. 10.-वाकाटकललामस्य क्रमप्राप्य नुपश्रियः ।
राशः प्रवरसेनस्य शासनं रिपुशासनम् ।।
Fig. 11.-स्वस्तिश्री: एतत् विश्वनृपश्थेणिमोलिमालोपलालितम्.।
धासनं राजराजस्य राजकसरिवम्म०णः।।

##  <br> guๆy

Fig. 12.

G. S. del.

The seal of Räjendra for the Tiruvälangāḍu plates suggests his conquest and power (pl. II-a). It is a fitting appendage to the most remarkable collection of copper plates strung on one ring, a more real epigraphical curio than the Paiṭhān plates. The bull on the seal of the Tandamtottam plates is also of exquisite workmanship. The lion on the seal of the Vispuukundin plates (pl. III-b) is realistic with its mouth open, paw raised and the tail looped. Of the exquisite elephant on the fifth century Western Ganga seal of the Penugoṇ̣a plates of Mädhava II, it would suffice to say that the beautiful letters of the insoription are matched by the realistic elephant done by the goldsmith Aiya, whose son Apāpa engraved the letters (Ibid, XIV p. 335). An epithet like Śri Tribhuvanān̄kúa occurs with boar emblem on Eastern Callukyam seals (pl. III-c) some of which are works of art (pl. IV.)

The seal was generally of metal, the royal seal of gold, and it was applied to a flattened ball of clay affixed to the document of which there are numerous instances in literature (Dhammapad-Attha-Kathä-Buddhist Legends I, p. 165). Even now there are to be seen on the backs of seals the impressions of the leaf documents to which they were affixed and of the holes for the string used for binding the sheets. A pictureques example of the use of the seal, and the clay presented for the purpose of stamping the seal is given in the Harsa carita.
" During the king's stay there, the village notary appeared with his whole retinue of clerks, and saying ' Let his Majesty whose edicts are never void, even now bestow upon us hiz commands for the day,' so presented a new-made golden seal with a bull for its emblem. The king took it. As soon, however, as a ball of earth was produced, the seal slipped from the king's hand and fell face downwards upon the ground, and the lines of the letters were dis. tinctly marked upon the nearly dry mud and soft earth of the Sarasvati's bank. Apprehensive of an evil omen, the courtiers were depressed, but the king thought in his heart: "The minds of the dull are indeed blind to reality. The omen signifies that the earth shall be stamped with the single seal of my sole command ; but the rustics interpret otherwise.' Having thus mentally welcomed the omen, he bestowed upon the Brahmans a hundred villages delimited by a thousand ploughs." (Harsacarita, trans. Cowell, p, 198). The original document on perishable material was kept by the Aksapatalika or the keeper of the records.
Fig. 12.-मण्डलाग्राग्रनिष्येषनिष्पिष्टराविसन्द्धतेः।
श्रीमतोप्रतिषाद्बस्य रणभीतस्य घासनम् ।

The more important copy, made on metal sheets which were strung on a ring with a facsimile seal made of metal affixed to it-not a mere sealing on clay-was presented to the person concerned. Surely the grants are embellished by the addition of such fine seals as zemarked by Bāṇa (Harsacarita, p. 284). Before, however, it was given away, it was compared with the original as may be seen actually recorded occasionally in the words drstam 'seen'.

## INSCRIPTIONS, THEIR FORM AND CONTENTS.

In India it has always been a habit to introduce auspicious utterances in works of any nature.

There is practically no work, literary, scientific or philosophical, without mangalasloka or mangalavacana, i.e., auspicious verse or word at the beginning. The mangalas may be of three kinds, $\bar{a} s i h$ or benediction, namaskriyä or salutation to the deity, or vastuninddeśa or suggestion of mangala while abruptly beginning the topic. This has been followed in all written documents. The inscriptions on stone metal plates and other materials follow the same arrangement.

In many early inscriptions, there are a number of auspicious symbols in addition to salutation. The salutation is generally short and in prose, though soon it develops into beautiful verses in praise of deities. Thus the symbols, Svastika and Śrivatsa occur in the Hathigumpha inscription of Khäravela to suggest svastiórī, a form in which actual writing marks the beginning of Cälukyan grants-स्वस्ति श्रीमतां. This is in addition to the brief salutation to the Jinas. The same symbols which occur as auspicious ending in some early inscriptions occur in words in many mediaeval inscriptions in the form, मंगलं महाश्री :. Asoka's inscriptions are examples of vastunirddé́a type of mangala as the word देवानां पिय begins with the auspicious word Deva-god. In the caves of Western India there are numerous examples of these symbols of auspiciousness. Sometimes Namo or Salutation is expressed by the symbol which is usually referred to by writers as Wheel on Trisúla. The symbols of a Drum and Bodhi tree also occur, the former probably representing prañava or Omkära or Bhagavän and the latter Närāyaṇa (as Aśvatthanärājana). The symbols in the Nanaghat cave are additional to the salutation to Sankarṣana, Vāsudeva, Indra, Candra, Sūrya and other deities. At Amaravati the symbols are used along with salutations to Buddha. Sometimes the word Siddham is used.

In early copper plate grants as in some of the early charters including Prakrit ones of the Pallavas, the early Western Ganga plates of Mädhavavarman, Viṣpukuṇdins, and the earliest copper plates from Kalinga, svasti is used in the marginal space almost pushing in one of the central lines of the first plate. Similarly, siddham is used in early Kadamba, Nala and other inscriptions as in those of the Guptas and Yaśodharman. Drstam is believed to be another auspicious word used as in some early Pallava Prakrit charters and those of the Vākāfakas.

But it is most probably intended to convey the idea that the copy on the copper plate has been compared with the original and found correct. Om is expressed by spiral symbol in Western Cälukyan and Räştrakûta inscriptions which they begin. There are other forms like जित भगवता in early Western Ganga and Pallava charters; ओं नम: शिवाय Epigraph. Ind. II, pp. 10, 410; VI, p. 200; XIX, p. 279), नमो बुद्धाय (Ibid, VI, p. 287), नमो भगवते बासुदेवाय (Jbid, II, p. 350 ; XIII, p. 290). नमो ब्रह्मणे (Ibid, $\mathrm{II}_{2}$ p. 3; XIX, p. 211), नम : सरस्वत्यै or भारल्ये (Ibid, II, pp. 182, 333). श्री गणाधिपतये नम : begins all later Vijayanagar grants.

Salutations to Siva and Viģu in beautiful verses are plentiful. Some are addressed to Devi also. Other salutations are to Vispu on the serpent couch or as Narasimha (Ibid, XIX, p. 241), Trivikrama, Vāsudeva, Krg̣ņa, Mukunda, Padmanābha or as the sportive consort of Laksmi (see Gähaḑavāla inscriptions from Kanauj). He is most popular as the Ādivaräha rescuing Prthvï in which form his praise begins all the inscriptions of later Cälukyas, Käkatīyas, Yädavas, Reḍḍis and Vijayanagar kings. Beautiful praises of Siva and Viṣnu occur in the Gupta inscriptions and the salutation to Siva in the Meharauli inscription and those of Yasodharman are splindid examples of their kind. There are also salutations to Sũrya couched in the most elegant language. Salutation to Ganapati precedes that of other deities in some inscriptions (Ibid, II, pp. 119, 276; XIII, p. 200; XIX, p. 49), principally of the Reḍdis and Vijayanagar monarchs. There are instances of Brahma and Sarasvati praised in some inscriptions. Brahma in the abstract form is also occasionally invoked (Ibid, XIX, p. 211). Salutation to Jinas begins all Jain inscriptions which abound in the Canarese country and Northern Gujarat. Mañjughoṣa (Ibid, p. 296), Vasudhărā, Mañjusrī and other Buddhist deities are also invoked at the commencement of certain charters. Often these verses contain details which help iconographic study (Sivaramamurti 4).

After the salutation, the pedigree of the ruler, the donor, is given. Three generations at least are mentioned. To take concrete cases, the Western Ganga king, Mädbava II mentions in his copper plate his father, grandfather, and great-grandfather Ayyavarman, Mãdhava and Śri-Konkaṇivarman respectively,' and a short account of exploits in addition to those of his own as the donor. Similarly, the Pallava king Simhavarman mentions his greatgrandfather Mahārāja Sri Vīravarman his grandfather Mahārāja Skandavarman and father YuvamahārājaViṣnugopa as repositories of penance and prowess, learned in Sãstras, abiding by the law and so forth. In the Valabhi grants, the founder Bhatãrka is mentioned and his glorious successors preceding the donor are described in beautiful embellished prose passages. In the inscriptions of the Guptas, the family tree up to the time of the king when the inscription is incised is given. The Mahăräjädhiräja Samudragupta, exterminator of all kings, without one of equal power in the world, whose fame was tasted by the waters of the four oceans, equal to Dhanada, Varuṇa, Indra and Antake, the very axe of Krtānta, performer of Asvameda, is mentioned as the great-grandson ot Mahärāja Gupta, grandson of Mahārāja Ghatotkaca, son of Mahārājādhirāja Candragupta and daughter's son of Licchavi
by his mother, queen Kumāradevĩ ; his son is mentioned as Mahārājādhirāja Candragupta by queen Dattadevi; his son is mentioned as Mahāāājädhirāje. Kumāragupta born of Dhruvadevi and his son Skandagupta of great glory subsisting like a bee on the widespreading water-lilies which were the feet' of his father. The phrase of Mätã-pitr-pädānudhyäta (i.e., contempiating on the feet of the parents) is a very common feature in most north Indian inscriptions together with the mention of father as well as mother which custom is continued from the practice observed in Gupta inscriptions. An excellant example of this is found in the copper plate grants of Harsavardhana where Mahārāja Srl-Naravardhana is mentioned first, thenhis son that contemplated on his feet Mahāräja Śri-Käjyavardhana born of queen Vajriṇidevi and a great devotee of Sūrya, his son that contemplated on his feet Ādityavardhana born of queen Apsarodevi and also a great devotee of Surrya, his son that contemplated on his feet Paramabhattāraka Mahārājādhirāja Śri-Prabhākaravardhana born of queen Mahāsenaguptādevi and also a great devotee of Sūrya and his son that contemplated on his feet Paramabhatttâraka Mahārājãdhirăja Śri-Rājyavardbana born of queen Yasomatī and follower of Buddha, and finally is his brother Paramabhattārake Mahārājādhirāja Śri Harṣavardbana, great devotee of Śiva, Paramamāheśvara. From this, it car be easily seen that in the same family there are Paramādityabhaktas, Paramasaugatas, Paramamahesvaras and even Paramabhãgavatas. The Guptas were mostly Paramabhăgavatas, followers of Vispu. The pedigree portion thus brought into the inscriptions forms a very important source for historians in settling successions and dating the grants where definite dating is not clear. When there are, for example, two or three Narasimhavarmans or two or three Mādhavavarmans; the names of the predecessors help in the correct location of the ruler concerned.

Sometimes, the mythical origin of the family of the donor is mentioned. When the family is Sūryvamáa, it is so described with poetic exuberance ; similarly in the case of Candravam $\delta$ a, the moon is praised in verses often full of poetic skill as the theme lends itself to excellent description. Sometimes is described his origin along with Lakshmi from the milky ocean, sometimes from Atri and mostly in his role as the crest-jewel of Śiva. Sometimes the mythical origin of a royal family from the fire of Vasisţha on Mount Arbuda is described at some length.

Sometimes the special favour shown to the family by gods or sages is mentioned. Thus in Calukyan grants, the special kindness shown to the rulers of this house by the Lord of Kausiki (Śiva) who gave them their kingdom, by Mahäsena whose feet they adored, the Saptamätṛkãs who were their protectors and Nărāyaṇa whose gift of the boar emblem assured them victory is always mentioned. In the Eastern Ganga grants, the kings of the dynasty are described as washed of all sins by their salutation to the pair of lotus feet of the Lord Gokarṇa on the Mahendra Mountain. In the Vākātaka grants, the Bhārasivas are described as specially favoured by Śiva because they carry the Śivalinga on their shoulder.

Some early legendry ancestor is often mentioned with great pride, as, for instance, Karikäla in the Tiruvālangãdu plates of Rājendracola. The great esteem in which the royal family was held by venerable men is sometimes mentioned, as in the Sinnamannūr plates where the Pändya kings are deacribed as honoured by the sage Agastya acting as their priest. Exploits of the king, the donor of the grant, are mentioned in what are known in Tamil as Meykirtis. The Meykirtis in the Tamil inscriptions of the Colas and the Pänḍyas differed with different kings and grew in length with every fresh victory. Such exploits are also vividly described in Sanskrit and Prakrit inscriptions and are called Praśastis, the Sanskrit for Meykirti in Tamil. Of such Praśastis, those of Gautamīputra Śātakarni in the Nasik oave, of Khäravela in Hathigumpha, of Rudrädàman in Girnar, of Samudragupta ir, the Allahabad Pillar inscription and of Yasõdharman in the Mandasor stone inscription are famous. The first two are in Prakrit, the rest being in Sanskrit.

The purpose of the inscription is then stated. The donee is mentioned. Sometimes it is a general who had distinguished himself in battle and earned the honour at the hands of the king, as in the Eastern Cālukyan grant of Amma I, where the king mentions the prowess of his general Bhaṇdanāditya alias Kuntäditya to whom he made over certain villages (S. Ind. Inscr. I, p. 38). Sometimes it is a presentation of land, for the daily worship, caru, bali and other offerings, dhüpa, dipa and other adjuncts of worship and for the maintenance of flower garden, etc., for the $p u \bar{j} \bar{a}$ requirements of some temple. Sometimes the grant mentions the gift of land made by the king in recognition and appreciation of the musical talents of a songstress of repute. But mostly, the grants record the gifts of the king to distinguished scholars in the Vedas and Sästras and for Bhattavytti or honorary professorship for freely imparting Śastric and Vedic knowledge. In such cases, the donee's name is mentioned and occasionally his pedigree as well, but invariably his gotra, bäkhāand special proficiency are mentioned. Sometimes it is a Kramapāţhi or a Ghanapāṭhi or a Yājñika, Agnihotrin or Yajvā or a Bahvrcacarana, a Caturveda, a Triveda, Dīssita, Dviveda, Śrotriya or Upãdhyäya. Whether the donee was a student of Rg, Yajus or Säma Veda is made clear by the mention of sākhá. For those who are interested in the study of geographical distribution of the Vedas, with special reference to their schools like the Väjasaneya, Taittiriya, Mädhyandina, Kaṭha, Kauthuma and so on and for the distribution of gotras like Vasistha, Bhärgava, Gautama, Vatsa, Bhäradväja, Mudgala, Sändilya, Kautsa, Käsypa, etc., and the mode of their occurrence, these inscriptions are valuable.

Where the gifts are made to institutions like a temple or a Matha or a Ghatik $\bar{a}$, there is mention of some special committee or elders of the villages or elected nembers of the village assembly called on to protect the gift or charitable endowment and the endowment itself is described with minute details.

These grants were usually made on auspicious occasions and the time chosen is always specifically given. May be it is a solar eclifse or a lunar eclipse or the time of some auspicious
constellation of planets. These help in the accurate fixing of the dates in terms of the corresponding dates of the Christian era. In the earlier Prakrit inscriptions, the regnal year of the king the pakga, the ritu or season and the day or dina are given. In the Khäravela inscription, the number of years from the time of the Nandas is given. In the Gupta inscriptions the date according to the Gupta era is given. In the Western Calukyan inscription of Mangalesa at Badami, the Śaka era is mentioned. In all mediæval inscriptions the Vikrama era or Śalivāhana saka era is mentioned. In the Eastern Ganga inscriptions the Ganga era is mentioned. The exact date of the Ganga era in the fifth century A.D. has been fixed by accurate mathematical calculation by Vepa Ramesam. There are other eras like the Cedi era and Harsa era which are of secondary importance. In mediæval inscriptions, the broad classification of ptu and dina is absent but greater detail is introduced by giving the ayana, mäsa paksa, tithi, vära, naksatra and any other peculiar phenomenon such as an eclipse. These details help the modern astronomer in correctly fixing the date.

The purpose of the grant is then specified, the extent of the land granted, the boundaries and other particulars. These details give sometimes the names of hamilets, adjoining areas trees, wells, lakes, river bank and so forth. Even in Sanskrit inscriptions, the name of these occur in the local language, as, for instance, in making the gift of the village, Maliyapungdi, its boundaries given are in Telugu, Munjunyūru in th east, Yinimili in the south, Kalvakûru in the west and Dharmavuramu in the north. The boundaries of the fields of this village are Gollangigunta pond in the east, the tank Raviaperiaceru in the south-east, a demarcation stone in the south and south-west, Malkaparru and the tank Koraboyutatäka in the west a demarcation stone in the north-west, a tank Dubaceruvu in the north, the north-east boundary being the same as that of the field Evvokacenu in Kalvakūru (Epigraph. Ind. IX, p. 56). It may be remarked that similar vernacularizations oocur for describing local weights, measures, and different items of offerings and we have examples of Guzraticisms (Ibid, I, p. 271) and Marathisms (Ibid, I, p. 338) in some late mediæval inscriptions of which Buhler and Kielhorn have given a useful list (Ibid, I, p. 163.)

At the end of the inscriptions there are the usual imprecatory verses which generally vary in number, sometimes long and occasionally restricted to a single verse. The inuprecatory verses in Prakrit charters are sometimes in Sanskrit. In other charters the imprecatory verses are in Sanskrit. Some inscriptions in Tamil, Telugu and Canarese, however, have short imprecatory prose passages in the language of the inscriptions.

In early inscriptions this is rather simple. The six of killing a cow and a Brähman and the guilt of five sins are pronounced for those wno violate the dharma य उच्हिन्दात्स गोब्रह्यहत्यया संयुक्तो भवेत् पश्चभिश्चानन्तर्यं : (Fleet, C. Inscr. Ind. III, p. 32) ; यध्वनं धमंस्कन्बं व्युच्चिन्यात् ₹ पन्चमहापातक : संयु क्त : स्यादिति (Ibid, pp. 38, 40). The sic of killing a cow, teacher and

Brahman and sins in additions to the five heinous sins are mentioned in an imprecatory verse in another Gupta inscription (Ibid, p. 71).

In the early Prakrit charter from Mayidavolu,king Sívaskandavarman threatens corporal punishment to one who causes trouble or annoyance to the donee by transgressing his orders जो अम्ह सासनं श्रतिच्हितुना पीला वाधा करेज्जा वा त कारापेज्ज वा तस क्रम्हो सारीरं सासनं करेजामो (Epigraph. Ind. VI, p. 87; also Ibid, VIII, p. 162 in Śimhavarman's charter. Ibid, VIII, p. 235 in Kumāraviṣnu's copper plate, and Ibid, III, p. 146 in Nandivarman's copper plate). This is what a king can do when he is alive and in power to enforce his word. But it is not posseble for all time. So devine wrath is invoked for assuring protection to the gift. There is also a prayer put forth to all future kings to take care of gifts of former kings. In this, the most powerful kings with one accord repeat the evanescence of wealth and the fleeting nature of their own glory and request with folded hands their successorg in power for all time to protect their gifts. Here they cite the mighty king Rāmabhadra of Ayodhyã as requesting all future kings to protect the gifts of former kings.

The Gupta king Pravarasena, like Śivaskandavarman, threatens punishment and fine to those who give even the slightest trouble to the donees, if they were denounced as culprits by the Brähmanas. He adds that he is silent about the many gifts of former kings which he has protected to avoid such boasts. He orders all contemplatory kings to protect his own gifts. Here one or two verses of Vyãsa are introduced in support of protection of gifts.

यश्वास्मच्छासनमगणयमानः स्वल्पामवि परिवाघां कुर्यात्कारयित। वा तस्य ब्राह्मणर्वेदितस्य सदण्डनिग्रहं कुर्याम । अस्मिश्च घर्मादरकरणेअतीतानेकराजदत्तसंचिन्तनपरिप, लनं कृतपुण्य, नुकीर्तनपरिहाराथ्थ न कीर्तयाम. संकल्पाभियोगपराक्रमोपजातान्वर्तमानानाज्ञापयाम: एष्यत्कालप्र भण्णुगौरवाद्रविष्यान्विज्ञापयाम:--व्यासगीताश्रात्र श्लोका:-स्वदत्तां परदत्तां वा यो हरेत वसुन्धराम् r गवां शतसहस्तस्य हर्तुर्हरति किल्बिषम् II
(Ibid, III, p. 262 and Fleet, O. Inscr. Ind. III, p. 247.)
Warding off of all troubles from the donee being a very important thing, the kings made necessary provisions in the charters; अचाटभटप्रवेष्य land was not to be a thoroughfare for chäfas and bhatas (Epigraph. Ind. XII, p. 36, Fleet, C. Inscr. Ind. III, p. 98 and Epigraph. Ind. XII, p. 141) अभटप्रावेश्यम् (Ibid, VI, p. 87) meaning regular troops. In one of inscriptions even the movement of wind on the donee's land is sought to be controlled reealling Hanumãn's remark in Lankā धायुरप्यत्र नाज्ञातश्चरेदिति मतिमंम (Rämäyapa, V, pp. 2-44).

The imprecatory verses grew in length in the later charters and we have all forms of curses heaped on the head of the wrongdoer. Bhagavăn Vyăsa is quoteã. Many kings like Sagara and others have donated lands and many have protected the gifts and the fruit of the gifts have also been enjoyed by the owners of the land. Sixty thousand years of heavenly bliss is*assured for the land donor, and hell for one disaproving the gift. The pilferers of Brahmadeya are born as dark cobras in the Vindhya forests bereft of water and live in the dried up hollows of trees.

बहुभिवंसुधा दत्ता वहुश्ञानुपालिता । यस्य यस्य
यदा भूमिस्तस्य तस्य तदा फलम् II षण्टि वर्षसकहस्राणि स्वर्गं
मोदति भूमिद. । अच्छेत्ता चानुमन्ता च तान्येव नरके वसेत् ॥विन्ध्याटवोष्वतोयासु शुष्कक़ोटरवासिनः। कृष्णाहयो हि
ज।यन्ते ब्रह्मदेयापहारकाः ॥
(Epigraph. Ind. VI, p. 211.)
The length of the imprecatory zerses increased firther in other grants. Vedic quotations and the dharma-sästra are mentioned as autborities. The gift is described as granted fox successive generations, as in the words of the Veda ' Growing from every clump created in hundreds and growing into thousands'. To allow the enjoyment in succession in the Conee's family and out of respect for the king and diarma, not the least annoyance should be caused to the donee. Then are conjured up the visions of hell and heaven for the destroyers and protectors of grants respectively. Protection of others' gifts has greater fruit than that born of one's own gifts. It assures the merit of thousands of Arvamedhas, hundreds of Väjapeya, and numerous Paundarika sacrifices. Eleven generations of Pitre (forefathers), evon if suffering in hell, ascend to heaven and immortal bliss by the act. But one who despoils land given by bimself or by some other is born as a worm in a refuse heap and is tormented along with his Pilrs. One who steals even a single gold coin or cow or an inch of land is condemned to hell tiil the great deluge. Of all gifts, that of land is the best ; it overcomes all accumulated $\sin$ of æons. Eleven generations of the donor's family suffering in hell free themselves by the gift of land like a serpent issuing from its cover; twenty-four generations of Pitrs including the donor ascerd heaven step by step casting off the cloak of sin. Such is the merit of the fruit (gift); out the piunderer of land destroys the fruit. The pilferer of land cannot cleanse himself of his evil oven by the performance of thousands of Asvamedhas and hondreds of Väjapeya sacrifices and by the gift of tens of thousands of cows. Even metal dust, stone powder and poison may be digested but who is it in the three worlds that can digest Brahmasva? Sacrifices are spoilt by the utterance of falsehood penance is diminished by pride ; but a swindler of land brings down to hell fwenty-one genezations of ancestors. Renlising that life is pohemeral liike waier drops on tips of grass blades
and like water bubbles,reputation and righteous conduct should not be allowed to dwindle. The voice of the Veda and'Smrtis proclaim to the Rṣis and gods, 'such is a land plunderer'; hence, Ohl men, do not plunder, Ohl do not plunder. Just as a drop of oil on water spreads, so grows the gift of land. The father's chuckle and the fore-fathers skip about in joy at the thought that in their family would be born a land-donor who would be their refuge. The gods, Āditya, Varuṇa, Viṣnu, Brahma, Soma, Agni and Śiva applaud the land-donor. The giver of land and its recipient, both of meritorious action, surely go to heaven. Thus reflecting on the fleeting nature of fortune and life, like a drop of water on a lotus leaf, and understanding all that has been thus explained, men should never destroy the gifts of others (Ibid, XII, pp. 324-325).

The last verse which refers to the evanescent nature of fortune and the short span of life allotted to man occurs in earlier grants like that of the emperor Harsavardhana. In a preceding verse the monaroh admonishes future kings in his own line conscious of great and noble lineage, and reminds them that it is obligatory on their part to protect the gifts of their ancestors before they gloat over their ancestry.

This gift should be protected by those that claim our noble lineage and also by other kings realising that a gift and its protection alone are the fruit of fortune which is fickle like the lightning and the water bubble (Ibid, IV, p. 211).

## SCRIBES.

One of the most important sculptures from Egypt is a wooden figure of a scribe from Thebes, now in the Cairo Museum. The soribe was a prominent figure in the ancient world. Ornamental letters were often written with the greatest care and dexterity by scribes. The lay public though well educated sought to avoid writing as the scribe's handwriting was distinctly superior. This is evident from the remark of Capakya that even though written with utmost care the letters of a Śrotriya (Vedic echolar) like himself would be far from clear श्रोत्रियाक्षराणि प्रयलल्लिकितान्पपि नियतमस्फुटानि भवन्ति (M wdrä̈räkpasa, Act I) and he prefers the services of a scribe ; and when the final draft is brought to him he admires the letters अहो दरंनीयान्यक्षराणि (Ibid, Act I). It was very often expert craftsmen that undertook the task of inscribing. But official documents on less permanent material like leaf, bark and cloth were executed by trained scribes, These were known as lekhakas. Some of extraordinary ability were ohosen to work in the royal palace and, being special officers under the king, were known as räjalekhakas. There is mention of a räjalekhaka-a king's scribe-in one of the donative insoriptions from Amarāvati, wherein is recorded his quota of embellishment to the stûps of the Enlightened One. An early example of a räjalekhaka in sculpture, not quite so remote in date from this incription and at no great distance from its findspot, is from Nägârjuna-
konds (Fig. 13). The scribe is shown here casting the horoscope and recording the predi-


FIG. 13.

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o . S . d o l .
$$

ctions of the ascrologers who were summoned by Suddhodana for knowing the future of his new-born son, Siddhārtha. He holds the cut leaves in the left hand on his lap and is rapidly incising the lines with an iron style with a large and convenient handle. Rajaleikhakas were also known as räjalipikaras and this synonym is used for a royal scribe Subāhita Gotiputa, whose donation is recorded at Sanchi (Epigraph Ind. II, p. 102).

The earliest of lekhakas in royal service known $\omega$ us from an inscription is Capads. $\mathrm{He}_{\mathrm{i}}$ is styled lipikara and was responsible for the Brahmagiri and Siddāpura version of Asoka's edicts (Hultzsch C. Inscr. Ind. I. p. 176).

The lipikaras, as testified by the inscriptions that they engraved, were sometimes really very skilful at their work and naturally took a great pride in their execution. One Süksmasiva from the Gauda country, engraver of the Apshadinscription of Ādityasena, describes his letters as beautiful विकटाक्षर (Fleet C. Inscr. Ind. III. p. 205). A scribe from Vijayaväda (Bezwada) who engraved a charter of the Eastern Călukyan king Narendramrgaräja is styled Aksaralalitäcärya, i.e., expert writer of beautiful letters (S. Ind Inscr. II, p. 36). Letters clear and distinct are compared to pearls and gems in all Indian languages. Such a description suggesting the beauty of letters occurs in a well engraved inscription from Bhuvaneśvar-

सूत्रकारः शिवकरः सद्वृत्तामक्षरावलोम् ।
निचखान शिलापट्टे मुक्ताफलनिभामिव ।।
(Epigraph Ind. VI, pp. 202-203). A scribe (sütradhära) Mahidhara compares the letters of an inscription engraved by him to the stars in the sky.
(Ibid II, p. 13). A scribe named Vísala describes his letters as beautiful (Ibid. II, p. 421).

The expression 'engraved in clear letters' is used by the clever Mathura scribe Vāsū in describing his own execution मायुरो . . वासू लिलेब fिमलाक्षरःः (Ibid. XII, p. 46). A Sûtradhära named Sāhila describes his well-cut letters as resembling the Goddess of Learning उल्कीणी सूनषारेण साहिले न स्फुटाक्षरा। चित्राइन वायय्रवर्णां सरस्षतीव साभते (Ibid. IX, p. 254). The letters are described as soft by another dexterous scribe Nägamundi who incised the Vasantagadh inscription प्रभाति मृदुभिर्वणों :्रोत्कीणां नागमुण्डिना (Ibid. IX, p. 192). Jalhana, the engraver of a copper plate of Govindacandradeva of Kanauj compares himself to Citragupta, the divine scribe, and as he puts it, he did his work with ease and pleasure for earning reputation करणीकोज्नतो विद्वान् चित्रगुप्तोपमो गुणःः। यरासे जल्हणः श्रीमानलिखत्ताम्रकं मुदा ।। (Ibid. VIII, p. 153). A neatly engraved inscription giving the text of the first two acte of a newly discovered drama, Pärijātamañjari by Madana, gives the name of the engraver Rāmadeva, son of an expert sculptor Sihāka उप्पकार्रकाण्डस्य सीहाकस्याद्नजन्मना (Ibid. VIII, p. 117). An artist Karnabhadra whose engraving is perfectly neat is described as an intelligent, courteous and accurate workman कर्णद्रेण भद्रेण शिल्पिनानल्पबुद्धिना। ताम्रं विनयनद्रेण निमितं साषुकमंणा II (Ibid. II, p. 354). A sculptor Sovarasi from the Canarese country actually boasts of his skill in one of his inscriptions : ' when he can entwine forms of elephant, lion, parrot and many other forms as to shine among the letters will you madly compete with such a sculptor, Sovarasi '-(Epigraph Car. XI, Cd. 47). The boast is not an empty one as may be seen from similar letters engraved in some of the Canarese inscriptions (Fig. 14). The personal experience of a distinguished scribe is recorded at the end of

an inscription by Somesvara who compares himself to $t$ lover painting intently with different colours a picture of his beloved one-

> शिल्पविन्मागष: कामी तन्मना वर्णभक्तिभिः । सीमेश्वरोडलिखदिमां प्रशास्तिं स्वामिव प्रियाम् ॥
(Epigraph Ind. XIII, p. 292).
One of the finest specimens of letter engraving on stone is the Tälagunds inscription. Its seribe whe is also the composer gives his name in the inscription itself as Kubja कुब्ज : F्वकाव्यामदमरमतले लिनेल (lbid, VIII, p. 33).

Sometimes the lipikaras were anxious to avoid errors of ommission or addition; the validity of the charter is specially emphasized in spite of all missing or redundant syllables कनाक्षरमधिकाक्षरं वा सबमनप्रमाणमिति (Ibid. XII, p.203). The scribe requests people that may read the inscription to forgive any errors of his in the writing. [ञ०త శవృ इట్ట $\overrightarrow{ }$. S.Ind. Inscr. IV, p. 214). In one of the charters the writing is said to have been executed by the person concerned by virtue of his office and the letters suggest that but for his presence in that office he could not have been selected for the writing लिखितं च ब्यापारणया ईंवरदासेन (Epigraph Ind. VIII, p. 287).

But there were also those whose writing, provided problems for decipherment. Bühler refers to the Vikramãnkadevacarita of Bilhana where queen Sûryamatí does not allow herself to be cheated by 'writers using crooked alphabets 'कायस्थै: कुटिललिपिभिः (Bühler, Ind. Ant. XXXIII, p. 50). Kutila or crooked letters were most difficult to make out and knowledge of them was considered an attainment-कुटिलाक्षराणि विदुषा. But the lipi named kuțilalipi by Princep is no more crooked than any other script and in fact is elegant. And being sometimes more floriated than other scripts has caused great confusion and strain to the eye in following the curves and strokes; and scribe Taks ăditya from Gauda takes pride in being well acquainted with crooked letters. . लिखिता गोडेन करणिकेष्णा। कुटिलाक्षराणि विदुषा तक्षादित्याभिषेयेन॥ (Epigraph Ind. I, p. 81). The letters of the beautiful Deopara inscription are executeḍ by Śolapāni who describes himst If and rightly as the best among the craftemen of Vārendra (Bengal) बृहस्पते: सूनुरिमां प्रशस्तिम् । चखान वारेन्द्रक शिल्पगोष्ठीचूडामणी राणकशूलपाणि : (Ibid. I, p. 311). The transfer of a manuscript of a prasasti to stone in clear letters incised on it is alluded to in the Mau inscription of Madanavarman (Ibid. I, p. 197).

Usually afterthe issue of the oral order of the king which was taken down by a high official of the court like an Amätya, Rahasika, Balādhikrla or Sändhivigrahika, e.g., Hargavardhana ordering Avanti his Sändhivigrahika (Harsacarita, p. 217) or after the king's approval of a prasasti composed by a poet, the text after having been neatly copied by a Karanika or Kayastha or lekhaka or lipikara was incised on metal or cut on stone by a professional engraver (Sütradhâra, Rüpakara, Takß̧ or Śilpi); but there are instances of the poet himself engraving the letters, like Kubja of the Tālägunda praśasti.

The payment appears to have been fair judging from an inscription, though it not is clear whether it was intended for the composer or the engraver. Yuddhakesari pperumbanaikkāran who wrote the Velvikudi grant of Neduñjadayan got a house-site, two ma of wet land and a dry field (Epigraph Ind, XVII, p. 304).

## ORNAMENTAL CHARACTERS.

The genius of each particular script has provided peculiar form for each letter of the slphabet. The seventh century Nägari script is by itself somewhat florid-Similarly the Canarese script in the Hoysala area of about the 12th to 13th centuries is ornamental. Tenth
century Eastern Callukyan script has similar decorative charm about it. But the letters of these acripts cannot be said to have any ornamentation introduced deliberately for decorative purpose. It is a natural decorative type. But there are many instances in Indian epigraphy of deliberate ornamentation of letters. Simultaneously we see the use of the regular and ornamental series, for instance in the Banskhera plates of Harsavardhana, the letters though decorative in shape are of the normal variety, while the signature of the emperor is in a highly floriated type ornamented for decorative purpose. In the Nagari inscription form the Kailäsanātha temple at Kãñcīpuram the numerous Birudas of the Pallava monarch are neatiy incised in both the simple and ornamental type of letters. In Fig. 15 both the varieties


T19. 15.
are shown. In Fig. 16 which shows one of the Birudas in the ornamental type, we can see not only the beautiful sway of curves and lines in creeper fashion but also in their contours,

no. 16.
O.S. del.
of the necks and wings of peacocks. The head of the peacock with a decorative plume is deftly introduced in the script and the whole plan of lettering is very clever and presenta a pleasing appearance. On a pillar in the temple of Rājivalocana at Räjīm, in the Central Provinces, is the name of Śrī Pūrṇãditya incised in a similar highly ornamental type of
letters (Fig. 17). Here the letters are so obscured by the peculiar decorative pattern added to them that it is rather difficult to make them out but they can be easily made out by comparing them with the same name in plain letters given along with it by Cunningham (Arch. Sur. Ind.


After Cunningham,
Fig. 17.
Rep. XVII, pl. X, p. 19, pl. X). It Western Chalukyan inscriptions which are in Canarese letters this clement of decoration exists. An execllent example is the Kurgod inscription of Calukya Soneśvara IV. The anusv ras of the invocatory verse are represented by stars arranged above the letters, and wherever the letters lend themselves to decoration they are shaped like animals and birds. Thus ones of them is shaped like a swan and another like a peacock. Flect (Int. Ant. XV, p. 364) has styled them bird characters. The sculptor who incised the prasusti takes a just pride for producing such amusing letter shapes. In the Biruda labels in Pallava Grantha script at Mahābalipuram and elsewhere the florid and the ordinary type of letters occur together. These ornamental letters, however, do not, offer any great difficulty in decipherment as in the case of the so-called shell characters which yet remain a puzzle. An example of shell characters from Central India is given in Fig. 18


Fig. 18.
(Hunter p. 10). The so-called shell characters occur even in distant Java (Fig. 19) and the name of Pūrnavarman has been read in one of these by Jayaswal (Epigraph. Ind. XXII, p. 4).


Fig. 19.
C. S. del.

## LITERARY VALUE OF INDIAN EPIGRAPHY.

The inscriptions are among the many sources for the study of Sanskrit literature. The language of sonie at least of the inscriptions is not without charm and is worthy of careful study. The records in copper plates and stone inscriptions are permanent documents and sometimes it is good that Sanskrit poets of repute have composed the praśastis. The Allahabad inscription of Samudragupta is an execllent piece of poetry composed by Harişeņa. This elegant composition and its poet would have been lost to the history of Sanskrit literature but for the inscription. Ravikïrti's praśasti at Aiholec is another instance in point. Though the name of the composer is lost, the importance of the Junägadh inscription of Rudradāman cannot be minimized. It is the earliest pure Sanskrit inscription and the language is most elegant. The Tālaguṇḍa inscription of Kadamba Kākusthavarman is another important. contribution to Sanskrit literature and fortunately the name of the poet Kubja is preserved. Here the majority of verses are in a metre which does not occur elsewhere. Sometimes well known poets compose the praśastis, as for instance, Umāpatidhara, the author of the famous Deopara inscription. Jayadeva mentions Umãpatidhara as one of the poets of his day, along with Dhoyi, and the praśasti is a valuable contribution to Sanskrit literature. In the inscription of Vema, the Reḍdi king, it is expressly stated that Srinätha, the poet and Director of Public Instruction in the kingdom, composed it and, as it is bilingual, it shows Srinātha's ability as a poet both in Sanskrit and Telugu.

Not only is a portion of Sanskrit literature contained in Indian inscriptions, but passages from many of the known Sanskrit works are a often quoted and thus help us in fixing the lower limit in the dates of composition of the works. Sometimes the works themselves are preserved by being engraved in letters of the century ; in such cases these lithic records are not only surviving copies of the work in question, but serve excellently in providing variant readings.

It was till recently believed that the Aihole inscription of Ravikirti contained the earliest reference to Kālidāsa but there is as I have already pointed out (Sivaramamurti 3, p. 25) an earlier insoription, the Mahākûta pillar inscription of Mangaléa, which gives a whole line
 cleverly dovetailing it as an epithet of the Cälukyas मानब्यसगोनाणां हारीतीपुत्राणां ध्रश्रतिहतोत्साहबल मतिप्रतापशोयंघेर्यवीर्याणां मातापितृपादानुष्पातानां यथाविधिद्दुताग्नीनों यथाकामार्चिंतार्थिनां श्रनेकषमंकम्पुप्पप्रसबानां चलिक्यानां. Similarly passages from the Ramāyana have been cleverly introduced in inscriptions and happily help us to show that at the time of the inscriptions they were present in the text of the book and were not later interpolations. The line नानागोत्रचरणतपस्स्वाध्यायनिरतेम्य : in the Mattepeạ̣̄ plates of Dāmodaravarman (Epigraph. Ind, XV11, $\mathbf{y}$. 329) is clearly after तपस्स्वाघ्यायनिरतं तपस्वी वाग्विदां बरम् the opening verse of the Rämäyana. In the Mahākūta inscription of Mangalesa there is the line समुद्र इव गंभीर : क्षमया य्रूयिबीसम : (Ind. Ant. XIX, p. 17) following Vālmíki's lines समुद्ध इव गाम्भीर्यं बर्येणं हिमवानिव ॥ कालाम्निदृृध : कोषे क्षमया पृथिवीसम : II (Rāmäyaṇa $\mathrm{I}, 1,17-18$ ). Another line from the same inscription ज्येष्ठ: श्रेष्ठगुणसमुदयोदितपुछरणपराक्रमाद्कत्रिय: (Ind. Ant. XIX, p. 17) is after the line च्येष्ठं श्रेष्ठगुर्युर्युक्तं प्रियं दशरय : सुतम्(Rämāyana I, I, 20). In the Satāra grant of the Eastern Cālukyan king Visṇuvardhana, nephew of Mangalesa the lines तस्य पुत्रो महातेजा : कन्द्पर्इव मूर्तिम् । षमंज़्ष कृतजक्ष पार्यतुल्यपराक्रम : (Ind. Ant. XIX, p. 309) are clearly after those in the Rämäyana स्पवान् सुभग : श्रीमान् कन्दपै ड़्र मूतिमान् and धज्च्च कृतशश्च सत्यषाक्यो दृबत्रत : ज (Rãmãyaña V, 34, 30 and I, 1, 2). Among the Pallava Biruda inscriptions of Narasimhavarman at Mahãbalipuram one on an ornamental pavilion of the Dharmarājaratha runs as सत्यपराक्रम : (S. Ind. Inscr. I, p. 4) after one of the epithets used by Välmĩki to describe Rãma दिव्यंगुणु: शाक्रसमो रामं : सत्यपराक्रम: (Ramäyana II, 2, 28). In Ravikirti's Aihole inscription the line जलनिध्धिख्बि घोम ं म्योम्नः समोऽमवदम्बुषि: (Epigraph. Ind. VI, p. 6) has Vālmīki's गगनं गगनाकारं सागरः सागरोपमः ॥ रामरावणयोर्युंद्ं रामरावणयोरिव। (Rämãyaña VI, 110, 23-24) as its model. The phrase पजन्येन एकाण्णवमूतायाभिव पृथिब्यां कृतायां (Epigraph. Ind. VIII, p. 42) in the Girnār inscription of Rudradãman clearly savours of the line in the Rãmãyana अयं ह्यत्सहते कुछ्ब : कर्तुमेका णँचं जगत् (Rämãyaṇa V, 49, 20).

Verses and passages from other important poets have been utilized by poets composing inscriptions. I have elsewhere pointed out the indebtedness of poets composing royal oharters to Kālidāsa. Among other poets is the pre-eminent Bāṇa. One of the invocatory verses of his Kädambari

# जर्नि बाणासुरमोलिलालिता: दशास्यचूडामणिचकचुम्बिनः $\uparrow$ सुरासुराधीशाशिखान्तशायिनों भवच्छिदस्त्यम्बकपादपांसवः ॥। 

(Kädambari 1, 2)
has been used as an invocatory verse in Mahārāja Kumārapāladeva's Rewah plates (Ind. Ant. XVII, pp. 230, 232). The opening verse of Bāṇa's Harṣacarita

## नमस्तु⿸्नारिरइ चुम्बिचन्द्रचामरचारवे ।

न्रैलोक्यनगरारम्भमूलस्तम्भाय शान्भवे ।।
(Harsacarita I, 1) begins many later Western Cälukyan inscriptions and is invariably used as the invocatory verse of Vijayanagara inscriptions.

Similarly, the third invocatory verse of the Rewah plates of Trailokyamalla Kalacuri (Epigraph. Ind. XXV, p. 5) is a copy of Daṇ̃in's praise to Sarasvatī in his Kävyädaŕ́a चतुर्मुखमुखान्भोजवनहंसवधूर्मंम ।
मानसे रमतों नित्यं सर्वंशुक्ला सरस्वती ।।
(Kävyädaŕáa I, 1).
The opening verse of the same plates.
जयतु जयतु देवो देवकीनव्दनोऽयं जयतु जयतु क्कष्णो वृष्णिवंशाप्रदीप: ।
जयतु जयतु मेघरयामल: कोमलाड्नो जयतु जयतु पृर्वीभारनाशो मूकुन्दाः ।।
is from the Mukundamälā Stotra of Kulasekhara where it occurs as the third verse. The opening verse of Kālidāsa's Raghuvamśa

वागर्थावव संपृ कौ वागर्थप्रतिपत्तये ।
जगतः पितरी वन्दे पार्वतीपरमेश्वरीं।।
is repeated in toto in the invocatory verses of the Huli inscription of the Western Cajukyan king Vikramăditya VI (Epigraph. Ind. XVIII, p. 197). Similarly, the Mangalaśloka of Kālidāsa's Abhijñãānasäkuntalam

या सृष्टिः सत्रष्टुराद्या वहति विधिहुतं या हविर्या च होत्रो
ये द्वे कालं विघत्तः श्रुतिविषयगुणा या स्थिता व्याप्य iवश्नम्।
यामाहुः सर्वभूतप्रकृतिरिति यया प्राणिन प्राणवन्तः
प्रत्यक्षाभिः प्रपत्नस्तनुभिरवतु वस्ताभिरष्टाभिरीशः ॥
is an invocatory verse in an inscription from Rajputana (Epigraph. Ind. XI, p. 65). Clearly after the opening verse of the Daśakumäracarita

ब्रह्माण्डछत्रदण्ड: रातधุ।तभवनाम्भोरहोनालदण्ड:
क्षोणीनौकूपदण्ड: क्षरदमरसरित्पट्टिक।केतुदण्ड:।
ज्योतिइचक्राक्षदण्डस्त्रि भुवनविजयस्तम्भदण्डोङ्: घ्रदण्ड:
श्रेयस्त्रंविक्रमस्ते वितरतु विबुघद्वेषिणां कालदण्ड: If
is the invocatory verse of the Pathäri inscription of Prabala
त्रिभुवनभवनस्तम्भो नभस्थलाम्भोधिसेतुरघदहनः।
ब्रह्माण्डमण्डलाम्बुजदण्डरुचिर्जयति हरिचरणः ॥
(Epigraph. Ind. IX, p. 252.)

The line नलिनीदलगतजलमतितरलम् from Śankarãcārya's Bhajagovinda stotra occurring in the Sevadi plates of Cähamāna Ratnapāla (Epigraph. Ind. XI, p. 310) is interesting both as proof of the genuineness of this important work and also as an index of the general influence of these inspiring writings.

The occurrence of the verse
सर्वमङ्नलमाङ्नल्ये शिवे सर्वर्थसाधके,
शरण्ये ग्यम्बके गौरि नारायणि नमोस्तु ते $1 /$
in the Dadhimatīmātā inscription of Druhlana (Ibid. XI, p. 299) is very important. It occurs in its complete form in the section called Devimähätmya of the Märkandeya-purãna. The latest date of the composition of the Devimähätmya is thus determined by the date of the inscription, the 7th century A. D.

Inscriptions like those from Swat giving Sanskrit renderings of verses from the Buddhist Pali texts (Ibid. IV, p. 135) only show as Bühler remarks that the Northern Buddhists had Sanskrit versions of several famous gäthäs untraced in the sülras of Nepal.

The occurrence of passages or even complete works in lithic records is illustrated by the inscription on the pillars of a Surya temple at Kãñchīpuram containing the Süryasataka of Mayūra in early Coḷa Grantha characters of about the 10th Century A.D. One alone of these pillars has survived to proclaim the popularity of the work within three centuries of its composition in so southerly a part of this vast land with the then difficulties of communication which however were no barrier against the travel of literary works and appreciation of literary beauty. In the collation of different manuscripts and the use of the earliest copies for determining correct readings, this is probably most useful.

The other example of a complete work occurring only as a lithic record is very valuable as the only surviving text when all other copics on perishable material are lost. An example is supplied by the Pãrijätamañjari nātaka by Madana discovered at Dhära, in the original Bhoj-sálã, now turned into mosque (Epigraph. Ind. VIII, p. 96.) and rescued from one of its walls. Along with this were discovered two Präkrt poems attributed to king

[^0]Bhoja and eulogising the tortoise incarnation of Visp̣u (Ilid. VIII, p. 241). As Bhoja is reputed as great patron of letters this discovery is of interest. It shows at the same time how the text of works engraved on stone and fixed in the walls of the great Universtiy established by Bhoja at Dhārā supplied easy reference books for the students.

Though the earliest Sanskrit incriptions are definitely later by many centuries than the literary works themselves, the inscriptions alone supply the earliest literary writings in the most ancient regional languages of the country like Tamil, Telugu and Canarese. The earliest Tamil works are dated round about the Christian era and their real antiquity is lost in a dark period of literary history ; but the discovery of peculiarly written Brahmi inseriptions in the numerous caves of the Tamil disticts and their able decipherment by K. V. Subramanya Aiyar hae proved that the earliest written records in Tamil can be traced back to third century B. C., and are contemporary with any of the other oldest records in India. Similarly, literary works in Telugu date from about the 10th-11th centuries A. D. and all earlier poetical efforts in the language should be traced to inscriptions. The local origin of metres like Akkara,the predilection for the use of such metres as Taruvoju which are later discarded, special early forms of using the anusvära, etc., and the beginnings of Telugu poetry established in the early Eastern Cālukyan inscriptions, may be so traced.

The literary value of the incriptions is clear from the language and ideas in the prasastis. In the earliest example of a pure Sanskrit inscription, Rudradāman's praśaśti at Girnar, the language is really charming. As already pointed out, in some places there is unconsious lisp and repetition of expressions of the Adikavi Vālmĩki. Both Śabdälamkära and Arthälamkära are present but it is the former that predominates. The sweet play of soft words and syllables is beautifully expressed in the works of Kälidāsa where they abound. The anupräsas and yamakas in Kālidāsa are very sweet. His language abounds in such expressions as ततोगगेन्द्रस्य मुगेन्द्रगामी वधाय वष्यस्य शरं घरण्य : (Raghuvaméa II, 30) बालामबालेन दुमुसीं बभाषे (Ibid. VI, 53), इन्दुं नवोत्थान्नमिवेन्दुमत्यै(Ibid, VI, 31), असो शरण्य: बारणोन्मुसानां (Ibid.VI, 21), अथ प्रदोषे दोषजः संवेशाय विशांपतिम्। सूनु : सूनृत्वाक्स्रष्टु : विससर्जोजितभियम्।। (Ibid. I, 95) पप्रच्घ कुदालं राज्ये राज्याश्रममुनिन मुनिः (Ibid, I, 58). कुलप्रदीपो नृपतिद्दलीपः (Ibid. VI, 74). पश्रच्छ भद्रं विजितारिभद्र: (Ibid, XIV, 31) इति रामो वृषस्यन्तीं वृषस्कन्घ: शाशास ताम् (Ibid, XII, 34). कृच्छूलक्षमपि ल०्षवर्णभाक् (Ibid, XI, 2), सप्तसामोपगीतंत्वां सातर्णवजलेशयम्। सप्तार्विर्मुड्याचस्यु : सतप्लोकंकसंश्रयम् (Ibid, X, 21), अहीनगुर्नाम स गां समप्रामहीनवाहुद्रविण : शाशास। (Ibid, XVIII, p. 14). As example of the yamakas we have all the verses of the 9 th Canto of the Raghuvamsa, besides others. Such examples in this inscription are to be seen in passages like गुरुभिरम्यस्तनानो हद्ददाम्नो (1.4) अभिषेयानां योषेयानां (1-12), हस्तोधिताजितोजित (1.13), दानमानावमान (1, 14), महाकत्रपनाम्ना, मतापदाम्न Бद्रदाम्ना etc. Examples like this occur in other inscriptions, as for instance, the line सुत : प्रसूतो पश्शां प्रसूति : घर्मंतो धर्मदोष :. कृत ड्वव कृतमेवत् in Mandasor inscription of Yaśodharman and समबतु वसुधारा धरंपीयृषधारा in the Sārnāth inscription of Kumäradevi (Epigraph Ind. p 323).

Combining a tendency of echo with anuprāsa runs the line कारिता शाला धीविशाला (Ibid. IV, p. 60) which reminds us of Kälidāsa's घीविधालां विदालाम् in the Meghaduta. The line the Pahoa praśastí of Mahendrapāla सरलितप्रचुरालकजालका: (Ibid I, p. 246) is an excellent example recalling similar yamaka in the verses of the 9th Canto of Kälidãsa's Raghuvamśa. The composition of the Kāngrà Jwãlămukhi prāsästi composed by Räghavacaitanya, a poet often quoted reverentially in the Śärngadharapaddhati is one string of anupräsas in which it abounds (Ibid. I, p. 192). Chekānuprāsa is illustrated in lines like चक्रे कृतीं सुमनसां मनसामकस्मादस्मादकालकलिकालविरामशंकां in Khajurāho inscription II (Ibid. I, p. 129). vrtyanupräsa has such examples as

मौलाविन्दुधरः फणाधरधरः स्कन्धे भवानीधरो
वामे कामधरः प्रमाणनिरतो गङ्नाधरो मूर्धनि
मूतों धूलिधरो गले गरधरः केशोषु वेणीधर:
पाणो शूलधरो हरः पुरहरः पुष्णातु वो मड्लल्
in the Káāakudi plates of Nandivarman (S. Ind. Inscr. II. p. 346) or
वल्गद्वेतालवर्ग त्रुटितनिर्जारोधारिधावत्कबन्ध-
ण्डातकुर्वंड्डाराकडिम्बं मुखबिलविलसत्सम्मुखोल्कामुखोल्कं।
मांसग्रासाभिलाषस्वनदशि वशिावाभैरवारातररौद्रं
रौद्रं यो धाम †वभ्रत्प्रतिसमरमिति द्वेषिचक्रज्चकार ।।
of the Bilhari inscription (Epigraph. Ind. I, p. 256). Fine examples of Lätänuprāsa
अहिमकरचक्रकुवलयविलसत्कमलालयः सदानवकायः ।
जलनिांधरिव हरिरवतात्पुराणपुरुषोडपि यः सदा नवकायः 11
शकलीकृतसर्वाङ्ञा नानाभरणभूषिता: ।
दृइयन्ते रिपवो यस्य नानाभरणभूषिताः ।।
(Ibid. IX, p. 252, 253). Kielhorn's remarks about the poetry of this inscription are particularly interesting in the light of the value he has attached to the piece and the pains he has taken in reconstructing the text of Harga, the author of the prasasti. All the type of anupräsas and yamakās are found in inscriptional literature. An example of Vakrokti is found in the verse

कस्त्वं द्वारि दिगम्बरः क्षपणक: कस्मादकस्मादहो
बाले_शूलधरो धिगायुधावधिं वर्हस्त्वदर्हा ननु ।

मां जानीहि महेरवरं स्फुटमिदं वस्त्रेप्यभावादिति प्रेयस्या परिहासतो विहसितं शान्भो: शुभायास्तु वः ॥
of the Kahjuraho inscriptions IV composed by Räma (Ibid. I. p. 140).
As for the arthälankära variety the examples are as varied and interesting. A few samples will suffice. Upamā of the dharmopameyalupta type may be seen in the verse

अव्धौ मुक्तायमाना शिरसि हिमगिरेरभ्र गह्नायमाना व्योम्नि ज्योत्स्नायमाना दिशि दिशि करिणां कुम्भमालायमाना । उन्चैर्देवालयानामुपरि सितपताकायमाना यदीया कीर्तिर्भ्रन्ता समन्तादनुनदि पुलितं राजहंसीयमाना ॥ of the Dewal praśasti of Lalla (Ibid. I, p. 79). Rüpaka illustrated in verses like दिक्सुन्दरीवदनचान्दनपत्रभछ्ञलील्रायमानघनविस्तृत कान्तकीर्तेः। श्रीराष्ट्रकूटकुलरौलमल ङ्करिष्णीस्तस्मादभून्निरुपमो निरवद्यशौर्य: ।।
from the pen of Trivikrama, the famous author of the Nalacampū in, a Rāṣtrakūta record of Indrararāja [Ibid, IX, p. 30], or

हेरम्बस्य विक्रल्पदन्तमुकुलं गौरीरहस्योत्सवप्रत्यासन्नविलासदीपकलिका गड्ना-
मृणालंङ्धुरः।
देवस्य त्रिपुरद्रुहो विजयिना पुष्पेषुणा मस्तके विन्यस्ता ङ्झुशविभ्रमा विजयते
चूडासुधांशो: कला H
in the Cebrolu inscription of Jaya (Ibid. V, p. 142). Utpreksã is illustrated in verses like
यदध्वरोल्लासिहुताशाधूमलेखाः स्फुटानेकविभर्धुभाजः ।
दिगङ्ननापीनपयोधरेषु विलासवेणीश्रियमाश्रयन्ति ।।
from the Bateśvar inscription of Paramardideva (Ibid. I, p. 210). The opening verse of Räjendracola's Tiruvālanngādu plates

स्वस्ति श्रीकण्ठकण्ठाभरणभुजगराट्मूर्नि माणिक्यमध्ये
दृष्ट्वात्मीयां सलज्जा प्रतिकृतिमपरामड्ननां शा ङ्कमाना ।
आइलेषालोलचित्तं कृतचरणनतिप्रार्थनं वो भवानी
दिशयात्पइयन्त्यधीरं निजपतिमनिशां सेर्ष्यमर्धक्षणेन ।।
[S. Ind, Inscr, III, p, 393] and the verse
भ्राक्यन्तीनां वनान्ते यदरिमृगदृशां हारमुक्ताफलानि
छिन्नाकोर्णानि भूमौ नयनजलमिलत्कज्जलैलान्छतानि ।

यत्नाण्चिन्वन्ति दर्मक्षतचरणतलासृत्विलप्तानि गुञ्जा-
स्नग्भूषारम्यरामास्तनकलशाधनाइलेषलोला: पुलिन्दाः ।।
from the Naihati inscription of Vallālasena (Epigräph. Ind. XIV, p. 160) are examples of Bhräntimat. Smaraṇa is illustrated in another, a pathetic verse from the same inscription of Vallālasena.

यस्यारिराजशिशाव: रावरालयेषु वालैरलीकनरनाथपदेงभिषिक्ताः ।
दृप्ता: प्रमोदतरलेक्षणया जनन्या निशवस्य वत्सलतया सभयं निषिद्धा:
(Ibid. XIV, p. 160), and another
उद्यद्दीधितिरत्नजालजटिलं व्याकृष्टमदृिगन.
कुद्धेनोपरि बैरिवरीशिरसामेवं विमुक्ताः शराः । धारासारिणि सेन्द्रचापवलये यस्येडथमब्दागमे गर्ज्जद्भूर्जरसंगरव्यतिकरं जीणों जनः शंसति ।।
by the poet Trivikrama in the Rāstrakūṭa record mentioned above (Ibid. IX, p. 31). Ullekha has a good example in a verse of Nrsimha, the poet of the 12 th century in Sihola stone inscription of Karnarā̄ja.

कन्दर्पबाणगणशाणशिलामनोजो दिक्कामिनीवदनदर्पणमण्डलश्री: ।
देव: शारी विजयतेउत्रितप:पयोधिमुक्ताफलं हरशिरोमुकुटैकरत्नम् ॥।
(Ibid. IX, p. 185) and in the verse from the famous Pallava temple of Kailāsanātha from Käñoĩpuram.

कलाचतुरयोषितां रहसि रञ्जने मन्मथस्त्रयीपथनिषेविणां सततपालने वासवः। मुनिद्विजसुरद्विषो हुदयदारणे माधवः स च द्रवणसंपदा सुजनतोषणे वित्तदः ॥
(S. Ind. Inscr. I. p. 12). Samäsokti is illustrated in another verse of Trivikrama

कृत्वास्पदं हृदयहारि जघन्यभागे स्वैरं पुनर्मद दु विमर्द्य च मध्यदेशाम, । यस्यासमस्य समरे वसुधाङ्जनाया: काॅ्चीपदे पदमकारि करेण भूय: । (Epigraph. Ind. IX, p. 30), the verse

भरत इव सर्वदमनः सगर इव कृतासमञ्जसत्यागः ।
कर्ण इव पुष्कलाङ्जो यः प्रियकाव्यो ययातिरिव 11
from the Kūram grant of Paramesvaravarman (S.Ind. Inscr. I, p. 148) is an example of Ślesa, as also the line

व्यपगतविषयस्नेहो हततिमिरदग़: प्रदीपवदसः़्नः
from the Bodh-Gaya inseription of Mahãnäman (Fleet, C. Inscr. Ind. III, p. 276); and more examples may be seen in verses like

> यशोदानन्दभाक्चक्रे पूतनामा रणक्रियाम् ।
> जातो वृष्णिकुले के स रिपो:द्छेत्ता नरोत्तम: ,।।
> गांधारीं भजता प्र; ष्टराकुनिस्वानप्रियां प्रेयसी
> भीष्मद्रोणवचांस्यकण्ण सुखदान्याकण्ण्यं संमूच्छता ।
> नो धर्मप्रभवं विरोधितवता प्राप्यापि, दंशक्षयं
> संप्राप्ता धृतराष्ट्रत्त सुसुहृदा विद्वेषिणेत्यन्द्रुतम् ॥
from the Khajurāho inscription (Epigraph. Ind. I, p. 145, 143) and
पीताम्बरं यस्य यशो बभूव सुदर्शानं यस्य वर्णुविजझे गुणोत्करो यस्य च.नन्द्रकोऽभूदासीत्स तस्मात्पुरुषोत्तमाख्यः ॥
from the Bateatvar inscription (Ibid. I, p. 211). In the verse of the Masulipatam plates of Vijayãditys III

यस्मिन्नारूढदन्तिन्यरिकुलमाधिसंरोहति क्ष्माभृदप्रं यद्वाहावात्तख ङ्झे रिपुयुवतिकरा गृहते चामराणि। आबद्धायां भृकुट्यां मधु रिपुभवने यस्य बध्नन्ति भृङ्ज यद्धामन्याजिभेरीध्वननमनु शिवाररात्रुधाम्नि ध्वनन्ति ।।
(Ibid. V, p. 124) there is an example of Sahokti of which another illustration may be seen in नाम्नैव यस्य रमणा छ्कविवर्तितनीनां रोमञ्चवेपथुभृतामारिसुन्दरीणाम् अरा णि बाह. वलयानि मनांसि सद्य : संत्रासवेगविधुराणि समं निपेतु : ।। in the Bhandak plates of Kṛṣ̣a I (Ibid. XIV, p. 124). Virodha and Virodhäbhäsa are respeotively illustrated in verses

दारिद्रयं हरतार्थिनो रिपुजनाल्लक्ष्मी मनो योषितो रूपं पञ्चशारादगाधपयसो गांभीर्यमम्भोनिधेः।
चिन्ं येन विचारचारमनसामाचारमातन्वता
सरंन्रैव जनापवादरहितं चौर्य प्रकाशक्तम् ॥

धनदोडपि न प्रमत्तो धवस्तसमस्तसविषोडपि न विरूप: ।
रत्नाकरोपि न जडो यो नाशोकोऽपि रागिष्ठ:।।
from an inscription in the Vaillabhaţ̧asvāmi temple in Gwalior (Ibid. I, p. 156). A verse of Umāpatidhara from the famous Deopara prasasti gives an example of Adhika in the verse

उच्चित्राणि दिगम्बरस्य वसनान्यर्धाड्ननास्वमिनो
रलाल द्बृतिभििविशोषितवपु: शोभाः शातं सुभ्रुवः।
पौराद्य श्व पुरी: «्मशानवसतेमिक्षाभुजोप्यक्षयां
लक्ष्ममं स व्यतनोद्दरिद्रभरणे सुजो हि सेनान्वयः॥
(Ibid. I, p. 310). Yathäsamkhya mixed up with Upamä is found in the verso

चलत्पताकान्यवलासनाथान्यत्यर्थशुक्लान्यधिकोन्नतानि ।
नडिल्लताचित्रसिताभ्रकूटतुल्योपमानानि गृहाणि यन्र ।।
of the Mandasor inscription of Kumăragupta and Bandhuvarman (Fleet, C. Inscr. Ind. III, p. 81). As an example of Vyäjastuti are the lines from the Nagarjuni cave inscription of Anantavarman Maukhari.

आसीत्सवंमहीक्षितां मनुरिव क्षत्रस्थितेदें रिक:ڭृश्रीमान्मत्त गजेन्द्रखेलगमनः श्रीयज्ञवर्म नृपः। यस्याहूतसहस्रनेत्रविरहक्षामा सदैवाध्वरंः पौलोमी चिरमश्रुपातमलिनं घत्ते कपोलश्रियम् ।।
(Ibid. p. 224)
So far padya (verse) has been considered; gadya (prose), however, has always been held by the Sanskrit poet as the touch-stone for judging poetic ability. In all Sanskrit literature none can equal Bāna in his majestic flow of language, rhythm in the construction of sentences and dazzle in the meanings and suggestions that appear on the surface and peep from deeper recess. The most typical models of noble Sanskrit prose composition are the passages in his Harşacarita where the unbridled flame of intellectual youth is evident. The Kädambari which abounds in equally fine passages shows the poet mellow and moderate in his expressions with experience and age. As Bhăss is styled as smile incarnate (häsa) and Kālidāsa as sport \{viläsa), similarly Băna is passion incarnate (Pañcab̄ānä). Bāpa has been the model for all prose compositions and in the lines

सोयं न रपतिमकुटमकरिकाम रकतप्र भापटलपल्ला वतपादपीठो गजपतिगलगजितप्र लयप च्चाननस्त्रिशा ङुपतिकपटपाटनक्रकचपात श्रपलपच्चालचूलचुम्बनचणचन्द्रहासो गिरि-

पतिपिचुपिण्डचण्डमारुतः कवलितकलिकालकपटपिटको निर्वाणपथिकलोपाकदर्शनसमाधिगत सकलदर्शानस्वरसपेशल्डानसंपद्विजितमुनिमनोवृत्तिराश्रयः श्रेयसामाकरः सर्व विद्यानामालय कलानामाधारः स्वामिसम्पदांपरमभट्टारकमहाराजाधिराजपरमेशवर परममाहेशवरनिजभुजोपा जितश्रीकन्यकुछजाधिपत्यश्रोमच्चन्द्रादित्यदेवो विजयी ।।
in Candradeva's plates (Ibid. XIV, pp. 193-195) the echo of Bānà's language is obvious. The descriptive epithets in the Nidhanpur plates of Bhāskaravarman.

कलियुगपराक्रमाकलितविग्रहस्य समुछ्वास इव भगवतो धर्मस्याधिष्ठानमास्पदं गुणानां निधिः प्रणयिनामुपघ्नः संत्रस्तानां श्रीसम्पदामायतनं। (Ibid. XIX, p. 118),
are clea:ly contemporary imitation of the great court poet of the paramount sovereign of the time.

Sometimes there are also examples of didactic poetry. In the Sarangarh plates the verse यौवनं विविधैर्भोगेमंध्यमं च वयः श्रिया। वृब्ध भावशच धर्मेण यस्य याति स पुण्यवान् ॥
(Ibid. IX. p. 280) suggests the equal allocation of time in ones life to the purusärthas namely, dharma, artha and làma. Kālidāsa's

वयोरूपविभूतीनामेकैंकं मदकारणम् ।
तानि तस्मिन्समस्तानि न तस्योत्सिषिचे मन :
(Raghuvamśa, XVII, 43).
and Bāna's
गर्भे श्वरत्वर्मभिनवयौवनत्वम्रतिमरूपत्वममानुषर्शक्तित्वं चेति महतीयं खल्वनर्थपरम्परा सर्वा। अविनयानायेकेकमण्येषामायतनं, किमुत समवायः॥
(Kädambari, p. 196.)
have strange inscriptional echo in the verse
शौरं श्रीयों वनं राज्यमेकैकं मदकारकम् ।
सर्वं श्रीमानभीतस्य निचिकारमुपस्थितम् ।।
from the Kondeḍda plates of Dharmarãja (Epigraph. Ind. XIX, p. 269).
As already pointed out most verses of Kăkusthavarman's Tälagunḍa inscription are very interesting as they are composed in a metre rarely found elsewhere. Similarly, in the Addanki inscription of Pandaranga the metre is special and proves its occurrence in very early Telugu.

## INFLUENCE OF INDIAN EPIGRAPHY ABROAD.

The key note of Indian civilization lies in its one basic culture that permeated the whole land, geographically divided by long rivers and large mountains but culturally knit by a constant unifying factor of common faith and ideals underlying the apparent diversity. In India two thousand years ago when communications were more difficult than now the bonds of this affinity were closer. The emphasis on differences is a later factor. The barrier of river and mountain was not so great as the barrier of conflicting dynastics. Asoka by combining under his sceptre the whole of the land greatly overcame these barriers but his successors like the Sungas, Sätavāhanas and Kalingas slightly undid his work by the very division of the country into fragments. The great Gupta emperors succeeded once again in establishing a well-knit empire. If we find the grace of Gupta sculpture at distant Elephanta in Western India or Ajanta in the Deccan, it is because the Maitrakas of Valabhi ruled as Sämantas of the Guptas in western India and the Väkātakas were close kinsmen under the direct cultural and political influence of the Gupta emperors. The script of the Guptas not only influenced palaeographic development in Western India and the Deccan but it even spread to the distant dominions of the Kadambas and Pallavas and accounts for the false box-head occurring in the letters of early Kadamba and Pallava inscriptions of the 5 th century A.D. On the other hand, local influence has also been at work and if the script of Asoka's edicts differs in areas, or the script of the Guptas shows variations in different localities it is due to such influences. Mediaeval sculpture is different from the Gupta or early sculpture of the same area, and with the tendency for local development, local variations developed from the mediaeval period with sharper contrast with the efflux of time. The shade of the single umbrella of a single king being eliminated, different and numerous parasols produced a chequred effect of light and shade; and so the complex schools of Indian culture. But the underlying vein was however the same. This unifying factor of Indian culture has spread beyond the mainland and widened the sphere of cultural bond. In distant Java as in Cambodia, Annam and other parts of South-eastern Asia, Indian culture from the mainland has ingrained itself in the soil and has made possible the rise of such monuments as the stupa of Borobodur, the Rāmāyaṇa reliefs at the Śiva temple at Prambanam and the great monuments at Ankor Thom decorated with Näga and Garuḍa motifs. The earlier figures from Java with all the grace of Gupta and Pallava sculpture and the late mediaeval carvings of Cambodian art suggesting affinities to the picturesque shadow figures of the Wayang, show the persistence of a great culture. This cultural conquest of South-eastern Asia more than the colonization and the effects of the brilliant conquests of the Colpa emperor Rājendra has survived. The discovery of bronzes at Negapatam showing Javanese influence in the case of some and that of the copper plate of Dharmapala at Nàlanda point only to the cultural comradeship of the empires in India and Java.

See PI. I whioh illustratea this chapter.

The sand buried manuscripts and documents of Central Asia and Tibet, recovered by Stein, are in a script which is surprisingly similar to the late Gupta script. Tibetan script has remained the same after the lapse of nearly a thousand years and more.

In Burma the script used in the fifth century A.D. in the Maunggun plates resembles closely the Śälankāyana script which was in vogne in the Krishna valley a little earlier. A couple of centuries later a further development in the script used there is recorded in the Pyu inscriptions. The modern script in Burma is a development from this script, though a thousand years and more have brought about infinite changes here as in the scripts in the mainland of India. Here may be observed affinities with Grantha-Tamil in some cases. The peculiar case of medial $e$ wherein the letter from the Grantha-Tamil is substituted for the full vowel in modern Burmese script is an instance in point.

In Ceylon the early script used in the 3rd century B.C. was quite akin to the contemporary script in India in the inscriptions in the caves in Tinnevelly, Madura, Trichinopoly, etc. In the second century A.D. the development is similar to that in the Krishna valley and in the inscriptions from Maharatmale the letters are exactly like the contemporary ones at Amaravati. It may here be recalled that some sculptures similar to the carvings of Amaravati have been discovered in Ceylon and the moon-stones with the beautiful decorations of rows of geese, elephants, etc., occurring in Năgărjunakonda are clearly borrowed from Ceylon. The inscriptions from Nãgarijunakoṇḍa indicate that there was cultural and religious contact between this part of the Andhra country and Ceylon. Later, during the time of Narasimhavarman Pallava, the contemporary king of Ceylon who was his friend was restored to his throne by the help of the navy of the mighty Pallava monarch. The picturesque description of the great fleet and the royal ship given in the Ceylonese Chronicle Mahāvaméa is easily visualised by a look at the two types of large ships from the magnificent panels from Borobodur, as the types occurring at Java represent similar ones from South India about the time. In the Ceylonese inscriptions of the tenth century A.D. the Grantha type is similar to that obtaining in South India at the time. The influence of both Granths and Vatteluttu can be seen in the script used. This is not only due to geographical proximity, but also to the frequent conquest of the island by the kings of South India, specially the great Cola emperors Rājarāja and Rājendra. In the modern script of Ceylon the peculiar slanting types of $t a$ and $n a$ in the inscriptions in Vatteleluttu are significant. Here, as in Malabar, the script has not meterially changed since the mediaeval period.

In Cambodia and Annam the evolution of the script has been similar. In the second and third centuries A.D. the script is very similar to that in contemporary India. In the 4th and 5th centuries, though there is a further development, the earlier type is still preserved. In the 8 th century the script changes and approximates to the script in Vengi or in the Andhra area and thereafter the further development in the tenth Century shows the influence of the Pallava script and even later Tamil script. Here the letter ka tends to shape
itself like the letter $k a$ in Tamil. $F a$ is shaped after the Canarese and Telugu type. $C a$ is similarly formed. $Y a$ tends more towards the Telugu-Canarese variety. In all these cases a peculiar box-head shaped or semi-circular head added to each letter distinguishes it, like the serif in contemporary South Indian letfers.

An inscribed slab from Malaya, mentioning Budhagupta, a Mahänävika, captain of a ship, shows the occurrence of a similar script in Malaya also. The inscription is of about the 5th century A.D., judging from its palæographic features. The place mentioned in this inscription, Raktamrttikã, is identified with Rangmati in Bengal and the close similarity of the letters with the southern variety in the Krishna area about the time proclaims the unity of culture.

The discovery of the interesting Yupa inscriptions of Mulavarman in Kutei in Borneo apart from proving clearly, a highly vigorous Brahmanical faith and powerful Hindu rule in distant islands shows the cultural affinity, a clear evidence of which is supplied by the clear similarity between South Indian Pallava script of the 4th and 5th centuries A.D. and the soript of these iriscriptions.

In the inscriptions of Pürnavarman from Java we can see clearly the palæography of Pallava script of the 5th and 6th centuries A.D. The numerous Sanskrit inscriptions found in these distant islands show the extent to which Indian culture penetrated, which is also testified by the sculpture and architecture in these places.

The deep-rooted nature of this culture can be understood, when we remember that even in Java to-day where the religion has changed, the Wayang plays yet immortalise the Hindu story of the Rämäyana, though the troupe that conducts it and the audience that appreciates it is mostly Muhammadan.

## INDIAN EPIGRAPHY AND SOUTH INDIA'S CONTRIBUTION.

The earliest inscriptions in India of which the edicts of Asoka are the most famous are in Prakrit. The earliest Sanskritic inscriptions come much later. The Girnar inscription of Rudaradäman is a very early example of an inscription in Sanskrit. So also is the inscription of Usavadāta, the son-in-law of Nahapāna, from the Näsik cave. The earlier tendency has always been to record the official documents in Prakrit. That is not to say that Sanskrit did not enjoy a great official position in the royal court ; for the Patañjali, the great grammarian, was amongst the most noteworthy persons of his time having great influence with Pusyamitra, the Sunga king, whom he helped in the performance of the A\&vamedha. Correct spelling, pronunciation and usage were everything for this great grammarian and the language was looked on as the heavenly cow. It was not without any basis or support that this position was claimed for this supreme language of languages which has been described later by Bhavabhûti as the language of the gods revealed to the world by great sages.

## संसकृतं नाम दैवी वागन्वाखयाता महर्षिंभिः

Still the language understood by the people was Prakrit rather than Sanskrit. In the Nätakas, the king, the priests, the $R$ şis, and the learned speak Sanskrit ; the queen and all the other common folk speak Prakrit. The language spoken and understood by the majority was Prakrit and this was chosen for the inscriptions.

Slowly, however, Sanskrit came to displace Prakrit in the inscriptions. It became a fashion to use Sanskrit more and more ; and though in the initial stages the language was generally simple, as we find in the earliest inscriptions of the Pallavas soon after the change from Prakrit to Sanskrit, still as the years advanced we can see the change in those very Pallava inscriptions of a later date, as for instance in the Kasāàudi plates or the Taṇdamtottam plates. Some of the long praśastis, as for instance the Mau inscription of Madanavarman, the Dewal praśasti of Lalla, the Khajuraho inscriptions, the Bateśvar inscription of Paramardideva, the inscription of Parabala, the Deopara inscription of Vijayasena, the Cebrolu inscription of Jaya, the Svapnefvar inscription from Bhuvanesvar, the Mandasor inscription of Kumäragupta and Bandhuvarman, and the praśasti of Yaḱodharman, are splendid examples, of what is described by Keith and others as artificial poetry. This, however, is not a fair way of describing this type of composition simply beoause the language is more complex, giving us samples of other literary päkas and not $d r a ̄ k s a \bar{a} p a ̈ k a$ in which Välmiki and Kālidāsa were adepts. As has been already pointed out there is no ritio päka which is absent in this branch of literature, nor is there any lack of enthusiasm on the part of the composers of the praśastis to introduce a great variety of śabda and arthälänkäras at their disposal. Often the model of earlier classical poets has been before them and the rich contribution of the composers of the prasastis has greatly added to the wealth of Sanskrit literature. It only remains for the students of Sanskrit to study these inscriptions as specimens of literature. A step in the right direction has been taken by the Nirnayasagara Press, Bombay, in publishing the two volumes of Präcinalekhamälä which unfortunately has not met with any great encouragement, and as the inscriptional literature now available in printed form is quite vast, it behoves all those interested in Sanskrit learning to make it a part of the study of Sanskrit literature.

The greatest bond in this vast sub-continent has been our cultural unity. If the pilgrim of North India craves for a dip in the Sangama or the confluence of Ratnākara and Mahodadhi (Bay of Bengal and Arabian Sea), the South Indian equally yearns for a bath in the holy stream of the Gangã or the confluence of the three rivers at Prayäga, Allahabad. Jagannäthapurí, Puşkar, and Dvāraka are places of simular importance. In ancient days students travelled to distant Universities at Taxilā, Banaras, Nālandā, and Kañci. Great philosophers like Sankara established centres of learning for the dissemination of knowledge all over the land and Sankara went all the way to meet Kumarilabhatma in distant Bihar. Rajjendra

Coḷa brought great Śaivite teachers from the banks of the Gangā and established them in his capital. The Pallavas encouraged families versed in Vedic lore to migrate from the Narmadā to their own kingdom and the survivals in the names Astasahasra, Bץhadcaraña and Vadama are significant. The Käśmĭri poet Bilhaṇa was patronised by the Călukyan king, Vikramäditya VI. The Kulinas were imported into Bengal from Kanauj. But the greatest bond was due to the influences of Śruti, Smfti and Itihäsa. If the Veda and the Purãna appeared like an overlord or a friend respectively in the voice of their mandates, Kàvya, came in with greater appeal like the sportive voice of the beloved one. It should here be remembered that the language of the Veda is quite different from the Classical and even that of the Puräna is archaic. It is the language of the Kävyas that has the greatest appeal and it is this that has enjoyed the position of the language of the court. Any court anywhere in India had only this; and there was no geographical barrier or linguistic for a scholar in that language anywhere in the land, and India abounded in Sanskritic scholarship. Whether Jagannātha wrote from Delhi or whether Appayya Diksita wrote from Viriñchipuram, the students and scholars who read and appreciated their work hailed from all over the land. The State language of India was Sanskrit. It was pure Sanskrit in all the inscriptions of North India whether of the Guptas, of the mediaeval dynasties like the Vardhanas, Maukharis, Pratīhāras, Paramāras, Candellas, Pālas, Senas, Gähaḍavalas, Haihayas, Gangas, in short, of any Northern dynasty. The Southern dynasties had also Sanskrit as the principal official language and almost all the grants are completely or nearly so in Sanskrit. The script used in all North Indian inscriptions is Nagari in one form or other, though the form differs in difierent geographical areas. In South India and the Deccan not only is the script different in different areas but also the regional language used for inscriptions alongside of Sanskrit. The Rāstrakuta inscriptions are mostly in Nagari characters and in the Sanskrit language though sometimes they are in Canarese-Telugu script, the language being either Sanskrit or Canarese or a jumble of both. Similarly in the Eastern Ganga inscriptions the script used is sometimes Nagari and mostly the Canarese-Telugu type. In the inseriptions from the Tamil area both Grantha and Tamil scripts are used, the former for Sanskrit and the latter for the Tamil portion of the inscription. In the Telugu area similarly TeluguCanarese script is used for both the Sanskrit and Telugu portions of the inscriptions.

All inscriptions in languages other than Sanskrit are in the regional languages. They belong to the mediaeval period and are restricted to the Southern part of the land. Though the earliest Tamil inscriptions are contemporary with the earliest Prakrit inscriptions, pure Tamil inscriptions of some length occur again only in the 6th Century A.D., as for instance, in the Pallankovil grent of Simhavaraman. This paucity of Tamil inscriptions from about the end of the Sangam age (c. 3rd century A.D.) to the beginning of the Pallava rule in the Tamil country ( 0 . 6th century A.D.) may be attributed to the unsettled conditions during the Kalabhra interregnum.

The three important South Indian lariguages, Tamil, Canarese and Telugu, are the only regional languages used in inscriptions in India, barring Prakrit used in early inscriptions.

Though it may appear rather surprising the fact remains that we have inscriptions practically in no other regional language. The presence of numerous inscriptions in these three languages does not however mean the non-prevalance of Sanskrit in the areas; on the other hand Sanskrit was given the first place as the accepted court language. But while in North India the kings used the official language Sanskrit for the inscriptions in South India, the regional languages were greatly favoured together with Sanskrit. The great and numerous Meykirtis or eulogies of royal dynasties in Tamil which supply most of the material for the history of the Cola and Pāndya dynasties are patterns of composition in themselves. Tamil Pallava inscriptions like Dantivarman's Tiruvallarai inscription are contributions to Tamil literature. The terms used in special senses in these Tamil inscriptions are so numerous, the vocabulary is so rich, the expression so elegant, and the diction so dignified that Tamil literature has been greatly enriched by this inseriptional literature. There is practically no pillar or wall of a temple, specially the plinth of a Cola temple-South India teems with temples of immense proportions distributed on the average of one for every mile or two, specially in the Tanjore district-which has not lengthy inscriptions on the exploits of the king or his numerous gifts or institutions he established. Indeed, the beautiful descriptions of royal exploits, rich in rhythm and colour of language, vie only with the greatness of the exploits themselves. The Colas and the Pändyas were among the greatest patror. 3 of Tamil literature. And the great composers of the Teväram Appar and Sambandar, were contemporaries of the Pallava who greatly honoured them. It is interesting to note that not only the opening verse of the great Tiruväcakam of Manikkavãcaka is inscribed on the palm-leaf shown in the hand of the bronze figure of the saint from Madukkūr, Tanjore district discovered nearly two decades ago as Treasure Trove by the Madras Government and returned to the villages for worship, but also some of the hymns including a few rare ones are found inscribed on the walls of the temple at Tiruvadavāyil, Tanjore district in Cola characters of the 12 th century A.D.

The earliest Telugu works like the Mahäbhärata are rather late, as Nannayabhatta, the father of Telugu poetry, is of the 11th century. But Nannecoda, the author of Kumärasambhava in Telugu, is a century earlier. The famous Yuddhamalla inscription from Bezwada in Telugu poetry is in the script of the 10th century A.D. Earlier still is the inscription describing the exploits of the Eastern Callukya general Paṇdaranga which is of the 9th century A.D. On the back of a monolithic, Dvārapālaka, an excellent example of an early Eastern Cālukya work which I brought a few years ago from Bezwada to the Madras Museum, an inscription was found reading Veginäthu velandu, meaning "servant of the lord of Vegi" in letters of the 7th century A.D. This is a very early instance of the use of Telugu in inscriptions. In an inscription a portion of which is in Telugu, the poet Śrinātha, the doyen of Telugu literature, is described as the composer of the inscription and his official position as the Director of Public Instruction in the Reḍdi kingdom is also mentioned. The Eastern Cālukyan, Reddi and Vijayanagara kíngs were great patrons of

Telugu literature and along with Sanskrit, the official language, the regional language had its due place in inscriptions.

Though the antiquity of Canarese goes back to the beginuing of the Christian era as fragments in that language were discovered in an Egyptian Papyrus ${ }^{1}$, regular Canarese literature is a thousand years old. Though even in the Canarese area Sanskrit occupies pre-eminent position in inscriptions, Canarese also occurs alongside.

The scripts of South India have contributed enormonsly to the spread of Indian culture overseas. As pointed out elsewhere, the script of Ceylon is derived from Grantha Tamil. The script of the inscriptions in Java like those of Pürnavarman closely resembles the early script of South India. The same applies also to the characters used in the inscriptions of Annam or Campa. It is therefore clear that the contribution of South India to Indian epigraphy is considerable not only in the development of languages but also in the spread and evolution of the script which has travelled beyond the seas to supply characters for writing in the many islands of the Pacific. The crowning achievement of this cultural link between South India and South-East Asia is the great military conquest of Malaya by Rājendra Cola a who commanded one of the finest navies that India ever possessed and brought South India and the East Indies into closer touch.

## THE DEVELOPMENT OF THE LETTERS OF ALPHABET DURING THE (ENTURIES.

A.-This, the first letter of the alphathet (Fig. 20), is found in nearly three similar forms in the 3rd-2nd centuries B.C. The Mauryan alphabet presents the letter in two ways, a vertical stroke with two arms moving away from a central point, either as straight or as curvilinear strokes. The letter from Bhattiproln has straight strokes, while in the early inscriptions from the Tamil caves of South India it is of both these types in addition to a third type wherein the vertical stroke is also shown curvilinear. The next important phase in the development of this letter is seen in the-Kuxann. Ksatrapa and Sätavähana inscriptions, all of the Eud century A.D. The lower arm develops qreater cuse in all the three, while tho vertical stroke is lengthened considerably and the curve becomes a definite curl in the inscriptions of the time of the Iksvakus. The worthern type of Cupta seript of the 4th century A.J. shows a development from that of the Kusan!, while the Central Indian tiupta variety of the same period gives that letter a box-head and the vertical stroke descende down and the curl is replaced by a parallel upward stroke. This is miformly repeated in all the letters of the box-headed variety, i.e., the Kadamba (Ath-nth centuries A.D,), the Väkāṭaka (5th century A.D.) and the Nala (5th century A.1).), he Somavarissi ( 6 th-ith centuries A.D.) and the Pallava (5th century A.D.) the low - load lieing most pronounced in the first four. This stroke is similarily formed in the Wiwerm Gauga (5th-6th centurits A.D.) Bnd Traikūtaka (5th century A.D.), though the parallel atroke is rather close in the former, In the Śālankāyana and early Pallava of the Brd-tll contories A.I. and the Viṣnukuḍin letters if the 6 th eentury A.D. the bottom eurve of the vertical st roke soars up with a flourish. In the Western Calakyan and Maitraka (6th eentury A. D).) and Eastern (ianiga (7th century A.D.) the vertical stroke repeats a parallel stroke, ass in the box-feaded variety, but in the Eastern Calukya of the 7th century A. D) the curl suar upsomewhat as in Viqnokupdin. In contonporary script from the Tamil area. The Pallava dirantha gives the vertical stroke as a double line, the two arms tending to combine to form a loop leffore reaching the vertical strok . In Tamil of the same period the arms conblate and foren a iow ;or reach: single vertiend stroke. In the Nagari of the time a single vertieal stroke shomts up a bute to left to form an angle at its bottom tip. From it- contre a small line joins the two arms cnrved into a shape resembling the Arabic numeral 3 (flowht arched). The precursor of this letter is already present in the letter of Yasimilarnan - - mseription. These are the parents of the principal scripts, Nägari, Canarcse. Tvluen (Erantla and Tanil.

In the further developments of the b-tue in Xisari a horiontal top aroke conmects the part shaped like double arch with the vertical aroke as in Rästrakûṭa serip' of the 9th century A.D. In the Paramarara inscriptions of the 1 It century A.D. there is a n.il head at the right end of the top stroke. The angular strok the bottom of the vertical line is


Fre. 9 .
lengthened and straightened in Yädava of the 13th century A.D. In the Nandinägarĩ variety of the Vijayanagara period the double arch that was all the while getting enlarged to the size of the vertical stroke stands quite equal to it. In the Eastern Ganga of the 11th century A.D. the small central stroke develops into a double curve, ouaking the letter somewhat different from the rest of the Nagari letters.

In the Canarese area, the lower end of the vertical stroke of the letter of the early Western Cājukyan of the 6th century A.D. runs up in semi-circular fashion to touch the top of the upper arm in the Rāstrakututa records of the 9th century A.D. In later Western Cälukyan of the 11th century A.D. the letter is composed simply of the vertical stroke running up after forming a curve at the bottom and curling up close to the top. A small stroke in the Central space is all that is left of the arms. This is further developed in Hoysala of the 12th century A.D, and in the Vijayanagara period the letter is the same type for Telugu and Canarese.

In the Vengi country the early Eastern Callukyan letter of the 7th century A.D. so develops that in the 10th century the lower arm curls twice, the upper one dwindling into a small serif which is touched by the tip of the vertical stroke that rushes up semi-circularly. The later developments of the letter are more or less allied to that of the Canarese alphabet.

In Grantha the loop of the arms becomes smaller in the 8th century but again enlarges in early Cola (11th century A.D.). In late Cola of the 13th century A.D. the tóp end of the arm which here appears curved develops into a regular angle-shaped top, the loop enlarges and this end of the arm pierces the stunted double line, occupying the place of the vertical stroke. This continues in the Vijayanagara period.

In Tamil the loop disappears in Pallava records of the 8th century A.D. and in the early Cola period the letter is just a curve attached to the top of a horizontal line against a vertical one. In late Cola (13th century A.D.) and Vijayanagara (15th century A.D.) the curve curls up at the top.

In Vatteluttu script the letter is somewhat like the Pallava letter of the 8th century but slanting towards left. Its development is seen in the Cola letter of the 11 th century A.D.
 lengthening is indicated by a small dash added on top or in the middle of the vertical stroke in Mauryan script. It is similar in Bhattiprolu script. In the letter in the Tamil caves the top stroke is used. In the Kusān script of the 2nd century A.D. the dash is at the lower end of the vertical stroke, while it is almost in the centre at the starting point of the arms in contemporary Ksatrapa and Sätavāhana inscriptions, its shape being curved in the Kgatrapa letter. In the 3rd century A.D. in the elongate Iksväku letter the curved dash starts a little below the point where the arms start. The dash is curved and in similar position in Kadamba


Fia. 21.
(4th-5th centuries A.D.), Sālankãyana (4th century A.D.), Pallava (3rd-4th centuries A.D.), Western Ganga (5th century A.D.), Naḷa (5th century A.D.), Viṣnukuṇdin (6th century A.D.) and Eastern Ganga (7th century A.D.), except that in Western Ganga it is a little near the lower end. The 4th century Gupta letter being derived from Kuṣān has an appendage of this curved dash from the vertical stroke below the point whence the arms emanate. In Maitraka (6th century A.D.), Somavamśi (6th-7th centuries A.D.), Western Cälukya (6th century A.D.), Eastern Cälukya (7th century A.D.), it is from the point where the arms start. In Pallava Nagari letter of the 7th century A.D. the curved stroke is towards the lower end, as also in Pallava Grantha and Tamil of the 7th century A.D., the curve running in a flourish in the last two. In Pallava Grantha however, the curve is double. While in Räṣtrakūța Nagari of the 9th century A.D. the dash is just in continuation of the central stroke, in other contemporaneous ones like Pratîhära and Păla (9th century A.D.) and in all the later ones like Gähaḍavăla, Sena, Yädava, etc., the dash becomes a line parallel to the vertical stroke and continues so in further developments.

In the Canarese area the dash is a curve projecting from the top of the vertical stroke which itself becomes a circle as in Rästrakūta (9th century A.D.) and in later developments, i.e., Western Callukya (11th century A.D.) and Hoysala (12th century A.D.) it continues so.

In the Telugu area the position of the dash is almost similar in Eastern Cälukyan of the 10th and 11th centuries A.D. and in Kàkatiya (12th century A.D.), with this difference that the starting point of the dash is at an angular point in Eastern Callukyan of the 10th century A.D., but in Reḍ̣i (14th century A.D.) and Vijayanagara (15th century A.D.) the curve of the dash forms a definite loop and runs in to join the central stroke.

The letter in Pallava Grantha of the 8th century A.J. shows a curl at the bottom which develops into a double curve with a flourish at its bottom and in Cola (11th century A.D.). Thís continues in Pãņ̣ya (13th century A.D.) and Vijayanagara (15th century A.D.)

In Tamil a curl at the bottom in Pallava (8th century A.D.) develops into a loop and ourt in. Cola (11th century A.D.). In Vijayanagara (15th century A.D.) the curl broadens with a flourish, shedding its loop.

In Vatteluttu script the letter has a loop and a curl at the lower end of the vertical stroke which itself is slanting, as already noted.
I.-In the Mauryan alphabet this letter (Fig. 22) is simply represented by three dots arranged triangularly. This arrangement continues even in the 2nd century A.D. in the Kspatrapa inscriptions but in the contemporary Kuşăn and Sātavāhana inscriptions the dots change into small dashes, one of which is vertical beside two parallel ones in the former. In the Gupta script of the 4th century A.D. the vertical dashas a little lengthened besides two dots in place of the other two dashes. In the Iksqvàku letter af tbe 3rd century A.D. the

dashes curve a little at their tips, and in the earliest Pallava records in Prakrit these appear as small crosses with arms extending so little beyond the point of intersection that they appear as dots more or less. The Kadamba letter of 4th-5th centuries A.D. is composed of a horizontal line with a slight central dip and ends bent down vertically a little above two dots. The form of this letter from the 5th to the 9th centuries A.D. both in Canarese and Telugu areas is only a little modified form of this type. In the former the line develops a small curve to the left and in the Telugu area to the right, but in both the horizontal length of the line is greater than the vertical part of it. In the Vākātaka (5th century A.D.) the dip of the horizontal line is replaced by an additional vertical in centre ; in Maitraka (6th century A.D.) the dots are replaced by dashes and in Eastern Ganga (7th century A.D.) the letter is much the same as in contemporary Calukyan. In the earliest Nagari of the 7th century A.D., both in the North and the South Indian scripts, represented respectively in Vardhana and Pallava inscriptions, the letter is composed of a sign like an interrogation mark without the dot below, turned at an angle of $90^{\circ}$ to the left with two dots a little above the curled head. This continues in all the later Nagari inscriptions of the Western Cälukyas, Räṣtrakūṭas, Pratīhäras, Paramäras,.Candellas, etc., but from the 12 th century A.D. onwards there is a change and a horizontal stroke above and two small circles joined together by a slanting stroke represent the letter in Gāhaḑavāla script (12th century A.D.). Two dots below with a triangle above forming the letter in Păla script (9th century A.D.) develop into two ovate parts, situated slightly above a dash and combining below a small vertical stroke reaching the top line, which descends vertically towards its left, in Sena (12th century A.D.). In Yādava (13th century A.D.) a horizontally drawn hook connected with the top stroke beneath it and a dash looped at one end compose the letter which in Vijayanagara Nand nägari (15th century A.D.) shows a vertical hook with strokes at both ends. In Kalinga Ganga script of the 11th century A.D.two small circles with a sickle-shaped sign on top represent the letter.

In contemporary Western and Eastern Cälukyan the two dots below the double curved line above transform themselves into a loop in continuation of the left end of the curved line and the line composing the loop develops in continuation to its left during the centuries in the Canarese and Telugu areas and is very pronounced in the Vijayanagara period (15th eentury A.D.).

In the early Pallava Grantha of the 7th century A.D. the curved line above runs down to the right to meet one of the two circlet dots below. Sometjmes the circlet dot touching the line is absent when the line turns up to run up parallel. In the 8 th century Pallava the first-mentioned variety continues as also a type in which the line running down slants to the left and a dot occurs on the right. In the 11 th century Cola seript the letter stairts with a curl, curves twice, slants down to its right and again down to its left. In the 13th century Pāndya the last slant of the letter straightens and it continues so thereciter.

The letter in Tamil of the Pallavas of the 7th century A.D. is shaped somewhat like the modern Arabic numeral 3 with a pronounced curve at the top start. The lower half of the figure is lengthened somewhat in Pallava script of the 8th century A.D., while the same is in addition a little broadened in Cola (11th century A.D.). In Vijayanagara (15th century A.D.) and later inscriptions, the lower part is flattened somewhat, while in this and the earlier Cola (13th century A.D.) the tail end almost encircles the figure in a flourish.

The letter in Vatteleuttu of the 8th century A.D. is peculiarly shaped, beginning with a broad curve almost forming a circle, then developing horizontally to the right to rise again and slant towards the curve, finally ending in an are which is somewhat angular. The curve hooks up at its start and broadens in Cola (11th century A.D.), the rest of the letter getting simplified into two ares one in continuation of another.
1.-This letter (Fig. 23) in its earliest form is seen in the inscriptions of the Tamil caves of the 3rd century B.C. where it is a vertical stroke flanked by two dots. In the Ksatrapa and Kuşān alphabet of the 2nd century A.D. the vertical stroke has a small serif at the top and is curved to left at the lower end. This continues so in Gupta script two centuries later but in Pallava script of about the same time the vertical stroke is represented slanting from right to left with the dots above and below it.

The form of the letter in Yasodharman's inscriptions of the 6th century A.D., and the later development in Harsavardhana's inscriptions a century later is just a modification of the Gupta type, the curve being replaced by just a thickening of the lower end. In letter of the 9th century A.D., this stroke separates into two parts one as a double arched serif above the dots and a hook below.

In Vākātaka script of the 5th century A.D., the box head appears as usual and the lower curve is emphasised by the formation of double line as in ra.

The later development in Cälukyan area is judged by the Rāş̧rakūṭa letter of the 9th century A.D. where the end of the curve has joined the serif to form a stumpy tubeshape with the dots on either side.

In the Telugu area about this time the form is the same but in the next century the body of the letter is more ovoid as seen in the Eastern Cälukyan alphabet of the 10th century A.D. In the next century the serif as usual in other letter of the time takes a $V$ shape and the two dots change into an arched stroke running across the belly of the letter and this continnes thence forwards.

In the Tamil area the Grantha letter is composed of the dots on either side of two close parallel strokes joined by a serif at the top as in ra; and the Tamil letter is a single vertical stroke with the serif modified as in other letters of the alphabet and with strokes.

In Vatteluttu script the letter is almost the same as the Tamil one except that it slants from left to right.


17ig. 22
U.-In the Mauryan script it is just two lines, a long vertioal and short horizontal on orming a right-angle and resembling ' $L$ ' (Fig. 24). It is the same type in contemporary script at Bhattiprolu and in the Tamil caves of the Pãndya country. In the Kuṣān, Kp̨atrapa and Sätavāhana inscriptions of the 2nd century A.D. and Ikspvāku of the 3rd century A.D. the angle tends slightly to become acute and a serif is developed at the top. In the earliest Prakrit Pallava of the 3rd-4th centuries A.D., the slanting vertical line is rather pronounced in comparison to the horizontal one which dwindles. In Gupta of the 4th century A.D., it is shaped like a hook with the angle rounded, and in all the box-headed varieties the serif is replaced by the box-head, the letter itself looking somewhat like an inverted question mark touching the dot transformed into a box. In the script of Yasodharman's time and Nagari from the 7th century A.D. the shape definitely tends to resemble the Arabio numera 3 with a nail head, as in Pallava, Vardhana (7th century A.D.), Western Cälukya (8th century A.D.), Paramāra and Candella (11th centruty A.D.); or serif, as in Rāștrakūṭa (9th century A.D.), later Western Cālukya (11th century A.D.), Gāhaḍavāla, Sena (12th century A.D.), Yādava Kākatiya (13th century A.D.), etc.

The letter in the earliest Western Cālukya (6th century A.D.) is almost a semi-circular curve with serif on top; this gets flattened and bulbous and the serif changes into a slight topward projection of the line and this develops more obviously in the succeeding centuries in the Canarese area till in the Hoysala (12th century A.D.) the line on top slants back and a borizontal stroke is introduced in the belly immediately above the lower line which is double arched.

In the Telugu area the earliest Eastern Calukyan letter of the 7th century has no seri but the semi-circular body of the letter lifts up its top which definitely projects vertically in the Eastern Cālukyan of the 11th Century A.D. and Kākatīya (12th century A.D.) In the last two centuries the lower line tends to develop a notch which produces a double curve and in the Käkatīya letter a horizontal stroke is added in the middle space which continueef Inter.

In the Grantha of the 7th century A.D. the slanting vertical line diminishes in size and develops a curve to the left while the horizontal lower stroke lengthens and slants downwards. The curve develops from the 8th century A.D. onwards, while the base line tends to rise up sgain in the Cola period (11th century A.D.) and definitely becomes straight from the later Pandya period (13th century A.D.): The top curve enlarges and definitely curls in the Vijayanagara period (15th century A:D.). It is exactly the same in Tamil.

In Vatteluttu of 8th century A.B. the letter starts approximately the same as in the Pallava Tamil or Gcantha, except that the base line has no slant, is longer and curved, with a definite inward angle at thę end. The curve of the body of the letter tends somewhat to broaden and straighten it Cola (11th century A.D.).

E.-In Mavryan script this (Fig. 25! is shaped like a triangle, composed of a vertioal stroke and two lines from either end meeting to the right at a central point. It is similar in the Tamil eaves, except that the two lines do not meet actually at the point. In the Kuşān soript of the 2nd century A.D. the triangle is so shaped that it has two angles on top and one below and in contemporary Kşatrapa and Sätavähana it is quite the reverse. In Gupta of the 4 th century it is similar to the latter. In Ikspäku (3rd century A.D.) the letter assumes a contour not unlike that of the human stomach, i.e., a deep curve lengthened towards the top right, bounded above by a shallow arc. In Sálankāyana (4th century A.D.) the belly of the letter protrudes to the left and the bottom curves in at the centre. This last feature of the bottom is absent in Pallava of the 3rd-4th centuries A.D. In Visnukuñdin of the 6th century A.D. the developed belly and the aroh in the bottom are present but there is a break where the line of the belly reaches the vertical stroke. In box-heared soript, the letter is represented by a square with the vertical line on the right prolonged above. This vertical line has a small top serif in Väkātaka script (5th century A.D.) and Somavaḿsi (6th-7th centuries A.D.) which it lacks in Kadamba in 4th-5th centuries A.D. In the Maitraka (6th century A.D.) it partakes off characteristics of both the box-headed and the Callukyan varieties.

The letter takes a shape tending towards that of the human heart in the script of Yaśodharman (6th century A.D.) which becomes more pronounced in the Vardhana and Pallava script of the 7 h century A.D., and in one form or other it is only a development from this in all the later varieties of Nagari. The vertical stroke to the right is a little lengthened in Pāla and Rāş̣rakūța of the 9th century A.D., in the Paramära. Western Cālukya (11th century A.D.) and the Gähaḍavāla 12th century A.D.). The top line separates from the boundary line to the left and curves in Nena (12th century A.D.) while in Yādava (13th century A.D.) and Vijayanagara (15th century A.D.) the tips of the line to the left curved in the former and straight in the latter and the shorter straight line to the right do not touch each other. In Kākatīya (13th century A.D.) it is triangularly shaped like the Vijayanagara letter with the lines from the sides meeting at the bottom.

A medial.-This (Fig. 26) is densted in the Mauryan script by a small dash added to the consonant usually to the top right; but sometimes as in $j \bar{a}$ or $n \bar{a}$ it is a middle stroke and not a top one. In the Bhattiprolu inscriptions this stroke is in addition to a stuoke already existing as a part of the consonant letter. In the Kusān inseriptions of the 2nd century A.D. this is represented sometimes as a dash but generally by a stroke slanting to right. In $j \bar{a}$ the stroke runs up somewhat in a curve in continuation of the central stroke. In the inscriptions of the Western Ksatrapa, as illustrated by those of Usavadāta and Rudradāman, the medial $\tilde{a}$ is represented by a simple dash usually at the top right but sometimes also at the centre, as in $b \bar{a}, b h a \vec{a}$, etc.


Fig. 25

In the Ikssvāku inscriptions of the Krishna valley this is represented generally by a horizontal top stroke, slightly curving towards its tip, and also by the earlier simple stroke without curve. In the early Pallava Prakrit charters the curve of the stroke is sometimes as in the Ikşvăku inscriptions, but sometimes the curve is more pronounced or it definitely develops a downward arm. The stroke for $j a ̈$ has a definitely greater flourish.

In the Gupta letters of the 4th century A.D. medial $\bar{a}$ is gonerally depicted as a not-toostraight horizontal top stroke but sometimes by an upward stroke, as in $j \bar{a}$ or $t \bar{a}$, in continuation of the central stroke in the case of the former and curving down from the top stroke to proceed up, in the case of the latter.

In the 6th century A.D., in the earliest Nagari letter to be seen in inscriptions, like Yasodharman's, medial $\tilde{a}$ is a slightly bent horizontal top stroke or a vertical one shooting up and ending in a curve to the right. The stroke is sometimes upwards from the bottom line or downwards from the top line, as in $\eta \bar{a}$ and $m a \bar{a}$ respectively. In the 7th century Nagari, as illustrated in Harsavardhana's charters, the upward stroke is above the top line, shaped like a query, and the bent horizontal stroke definitely becomes a short abrupt downward stroke. In the inscriptions of the Pratihāras of the 9th century this stroke is elongated, while upward strokes are also sometimes found as in $t a$. In all subsequent Nagari inscriptions like those of the Paramāras in Gujarat and Malwa area and the Senas in Bengal, the downward side stroke elongated is the only form to denote medial $\tilde{a}$.

In Central, Sonthern and Western India in the 5th and 6th centuries A.D. the medial $c$ is denoted by a horizontal top stroke to the right curving downwards, as seen in Vākātaka (5th century A.D.), Pallava (5th century A.D.) and early Western Cálukya (6th century A.D.) inscriptions, though the upward stroke also occurs sometimes as in $\boldsymbol{n a}$. Both the varieties oceur in Eastern Cailukyan script of the 9th century with a change that likens the strokes to those of the 6th century Nagari.

In the Telugu inscriptions of the 12th and 13th centuries A.1), illustrated by those of the Käkatiyas and Reḍdis, the horizontal stroke is with a definite curve which later benomes curl to the right.

In Pallava Grantha of the 7th century A.D., medial $\bar{a}$ is represented by the addition to tbe top line of the consonant letter to the right, a small crescent with a wavy vertical stroke above it in its centre. In Pallava Grantha of the sth century, upward and side strokes to right and in the contemporary Tamil the side strokes above, represent this sign. The side stroke is more elaborated in the Cola period, and the 15th century Vijayanagara inscriptions the medial $\bar{a}$ in Grantha and Tamil is represented by a shorter and longer vertical line with top stroke.

I medial. - In the 3rd century B.C., as seen in Asokau inscriptions the medial i(Fig. 27) is a horizontal top stroke to the right, which forms an angle by darting up vertically. In the Kugăn script of the 2nd century A.D, this curves up to the left and sometimes bends doubly

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towards left and right. In Uşavadāta's inscription the leftward curve is the feature, but in inscriptions of Kṣatrapa Rudradāman of the 2nd century A.D. the leftward curve is deeper. In contemporary Sātavāhana inscriptions the curves are much the same, as in Kuṣān. In the Ikeqvāku inscriptions of the 3rd century A.D, the leftward curve tonds to rise up, sometimes straightening up but always forming a curl at the tip, occasionally the main curve itself being right instead of leftward, as in $l i$. In Pallava.Brahmi of the 3rd-4th centuries A.D., curves are towards left generally and to right occasionally as in $l i$ to denote medial $i$.

In early Gupta inscriptions the leftward curve is the sign for the letter. For the first time in the Nagari of the 6th century A.D., as in Yasodharman's inscriptions, the curve runs leftward and turns right to form a double curve in flourishes or proceeds up leftwards and ends by running down vertically, or, simply curves left and runs down deep vertically. In the 7th century Nagari inscriptions, like those of Harsavardhana, the flourishes increase, the leftward stroke curving twice and sometimes having an inverted crescent added to the tip. The plainer form is the leftward curve which curves down deep vertically. This second type continues in the Nagari of the Pratīhāra inscriptions of the 9th century A.D., a curl at the top end being present very often. In the Paramära inscriptions of the 11th century the curve straightens or bends a little inward in the centre and in the Sena inscriptions of the 12th century A.D. the curve is shallow and its downward course vertically straight.

In the Central, Western and South Indian early mediaeval scripts, like the Vākātaka, the early Pallava and the early Western Cälukyan, of the 5th-6th centuries A.D., medial $i$ is represented by an upturned crescent streak, which sometimes appears as a full circle where the shape of the top stroke of the letter demands it.

This definitely flattens at the top in the Eastern Callukyan script of the 10th century A.D., though it continues much as in its earlier form in the Käkatiya and Reddi inscriptions of the 12-13th centuries A.D.

In the Pallava Grantha of the 7th century A.D. this curve starts after forming a hook shape from above the serif of any letter ; the hook is however absent when there is no serif involved and one end slightly curls. The simple semi-circular curve and full circle at the top of letter is the sign of the medial $i$ in Pallava Grantha and Tamil of the 8th century A.D., while in later inscriptions, like those of the Colas in the 10th-11th centuries and the Vijayanagara kings of the 14th-15th centuries, an inverted crescent streak or are is the usual sign in Grantha and Tamil, except occasionally when, as in $t i$, there is a special sign to denote the medial element.

I medial.-In Mauryan script medial (Fig. 27) is represented by doubling the sign of medial $i$, as in $m i$, $t \mathbf{i}$, etc., or by two parallel slanting strokes, as in thi. In the Kuṣan script of the 2nd century A.D. the sign for the medial is composed of two curves from either side of the top point of the letter forming horse-shoe shape. In Usavadāta's inscriptions at


Nasik the curve to the right runs up and turns slightly to form the shape of an upturned interrogation mark without the dot. In the Kşatrapa and Sātavăhana inscriptions of the 2nd century A.D. the curves one on cither side of the top point of the letter form horse-shoe shape or a nearly complete circle. In the Iksväku letters of the 3rd century A.D. one of the two curves shoots up and both sometimes curl at the top end. In Pallava letters of the Prakrit charters 3rd-4th centuries A.D. the two curves are not quite so different as in the Ikşvāku medial i sign.

A curve to the left and a vertical from the right side of the top point usually denote medial i in Gupta letters, as in the Allahabad inscriptions of Samudragupta; but two curves, one rising slightly higher than the other also occur frequently. In early Nagari, as represented in Yasodharman's inscriptions, medial is is a hook rising up to the left from the top point of the letter. This curls in and curves out again to the right with a flourish and gathers an upturned crescent at its tip in the Nagari of the 7th century A.D. as in Harsavardhana's charters. In later Nagari, as in the Pratihāra inseriptions of the 9th century A.D., medial $\boldsymbol{i}$ starts as a curve above the top of letters and ends as a curvilinear stroke running parallel to the height of the letter. The top curve of the sign changes sometimes into a curl in letters of the Paramara inscriptions of the 11 th century A.D. In the Snna inscriptions of the 12 th century A.D. the stroke is straight except at its lower end.

In the Vākātaka script of Central India a horse-shoe shaped curve and a small central vertical stroke represents the medial i. In early Pallava inscriptions of the same date, 5th century A.D., and in early Western Cālukyan letters of the 6th century A.D., the medial aign is a horse-shoe shaped curve that curls to left and forms a spiral. In Eastern Cālukyan inscriptions of the 10th century A.D. the horse-shoe shaped curve flattens at the top, and
amall hook-shaped vertical stroke is added in the middle. In Käkatiya and Redḍi ins oriptions of the 12 th and 13 th centuries A.D., a curve curling to the left represents medial $\mathbf{i}$. The same sign obtains in Pallava Grantha and Tamil of the 7th-8th century A.D., while in the Cola and Vijayanagara inscriptions from the 10th to the 16 th centuries A.D., the curl of they curve is to the right.
$U$ medial.-In Asokan Brahmi medial $u$ (Fig. 28) is denoted either by a stroke which is eitber horizontal or downward vertical in continuation or issuing from a bottom of the letter In the Kuṣān script of the 2nd century A.D. the horizontal stroke curves a little at both ends, while the vertical downward stroke lengthens. It is same in the inscriptions of Eqavadãta, though the horizontal retains the same simple earlier form. In Kspatrapa script of the 2nd century A.D. the horizontal changes into a short downward stroke, curving up in the right into a hook,", and the vertical stroke slants slightly to left at the lower end with slight small curye at the tip. In contemporary Satavāhana inscriptions the sign for medial $u$ is either a straight horizontal stroke or a slightly bent or downward elongate stroke, slanting slightly towards its end. In the Ikṣāku letters of the 3rd century A.D. the short hook-like

curve and the more common elongate downward stroke ending in a broad curve to left are the two forms of Medial $u$. In the Pallava Prakrit charters that are close in date to the Ikģäku inscriptions, there are three forms, viz., the elongate downward stroke with final ourve to left, the short downward stroke curving and fully rising up to right hook-like and the horizontal stroke with curved tip. As may be observed in all these early letters of various dates and in the letters of later date as well, the horizontal stroke in any form is added to letters like $k a$ or ra, i.e., those with a single long vertical stroke, extending down beyond the body proper of similar letters; it is added either somewhere near the end of the vertical or at the end itself. In the earliest letters, the horizontal is used for letters like $t a, b h a$ etc., i.e., those with more than one short stroke composing the body of the letter, but this soon changes into a small hook as in, $t u, g u$ su in somewhat later letters. The downward elongate stroke, which is at first short, then long, subsequently slanting and curved and lastly straight and hook-shaped at the end, is used in the letters with a stroke composing the base of the body, as in $b a, n a, p a, s a$, etc.

In the 4th century A.D. in the Gupta inscription on the Allahabad pillar all the three varieties occur ; the horizontal stroke is added at the very end of letters, like $r a$, and the curve is so pronounced that it appears sickle-shaped; the downward elongate stroke is just straight; and the hook-shaped stroke descends to left and rises up again at the right. In early Nagari, represented in Yasodharman's inscription, the sickle-shaped hook and the downward elongate stroke with a small barb at the tip represent medial $u$. This continues even in the 7th century A.D. In the Pratīhāra and Paramära inscriptions ranging from the 9th to the 11th century A.D. the sickle-shaped sign continues. In the Sena inscriptions of the 12th eentury this as well as the barb are found, in addition to a small sign composed of two strokes forming an upward right-angle to right and is added to letters like $r a$ to sound $r u$.

In the Central Indian script of the 5th century A.D., as seen in Vākāţaka inscriptiong hook-shaped signs to right or left form sharp angles, as also the horizontal transformed into angn composed of two strokes, forming a downward right angle to right. In Pallava scrint of the same date in South India the hook-shaped sign to right and the somewhat curved hornzontal stroke are, as in the Central Indian script, lacking definite angularities, but the hookshaped sign to right is drawn with a flourish to form a semi-circle below a letter from the tip of one of the lower arms of the letter, ac in $g u$. In early Western Cälukyan script, a century later, in the same letter, the semi-circle crawn with a flourish narrows into a long drawn hook, with its end shooting up the whole length of the letter. The other two forms are as in the early Pallava script of the 5th century A.D. In early Eastern Cajlukyan script of the 7th century the hook-shaped sign is just composed of two parallel vertical strokes connected at the lower end by a small curve, though the regular hook shape continues even in the 11th certrury soript of the Eastern Calukyas. In the Käkatīya and Reḍdi inscriptions of the

12th and 13th centuries, medial $u$ is of orescent shape, which is occasionally lengthened towards top to right.

In Pallava Grantha of the 7th century A.D., medial $u$ is represented by two signs ; the hook-shaped sign transformed into something like U , compressed and elongated; and tho sign formed by a sweeping flourish, resembling a sickle somewhat but with as light curl at the tip, which makes the whole sign look somewhat like a creeper tendril. In Pallava Grantha of the next century the compressed $\mathbb{U}$-shaped sign, a crescent-shaped sign and a sign compused of two strokes, suggesting the outline of one end of a boat, represent medial $u$, while a aiga like the lower half of No. 3 and another of two strokes suggesting ' $L$ ' reversed, represent it in Tamil. In Cola Grantha script of the 11 th Century A.D. the U-shaped sign and a clampshaped sign represent this, while in the Tamil script a downward vertical stroke and a siga like an upturned question mark, without the dot, are used. In the 15th century Vijayanagara script and later, the medial in Grantha is either an angular U with the bottom line projectiry a littla to the left, or is a sign somewhat like No. 3 , the former added beneath and the lattaz beside the consonant. In Tamil it is a slight modification of the earlier Cola type.
$\hat{O}$ medial.-In Asokan Brahmi $\bar{u}$ (Fig. 28) is represented by two strokes added to the bottom of letters. The strokes are either horizontal or vertical. In Kuşann letters of the 2rd century A.D. the horizontal strokes slant a bit and the vertical strokes join atthe top to form a fork. In Usavadäta's inscriptions the fork is replaced by a sign resembling a question mark without the dot. In Kspatrapa letters of the 2nd century A.D. a short and a long and sometimes bent-up stroke made up the medial $u$, as also the parallel horizontal strokes, which are added to the right not at the tip but in the middle. The sign, consisting of the longer and shorter vertical strokes, occurs in contemporary Sātavāhana inscriptions as well. In the Ikgväku inscriptions the shorter of the two vertical strokes is a horizontal stroke that slants downwards a bit and the vertical downward stroke is like ' $J$ ' in written script. The parallel strokes are also used sometimes and these slant to right. In the early Pallava Prakrit charters it is somewhat like the first mentioned type, occurring in Ikḡāku letters, bes reversed.

In the 4th century Gupta inscriptions, one sign is a vertical downward'stroke running to the left as a curve, as in $d h u \vec{u}, s \bar{u}$, etc., and a curve running up into a vertical, to which is attached a horizontal stroke terminally curved downwards as in bhiu. In Yaśodhazman's inscriptions this is represented as an upturned sickle with small horizontal stroke to right, as in $g \tilde{u}, b h \tilde{u}$, etc., and as a downward half arrow mark with long horizontal stroke to the left issuing from about the centre of the vertical. as in cu. Both these types continue in the Nagari of Hargavardhana's time. In the Pratǐhära script of the 9th century A.D. it is like a hook with its straight end elanting down to right. In the Sena inscriptions of the 12th century A.D. the type just mentioned and another composed of two brackets added centrally to the vertical of the letter to the right make up this medial. 'The former may be aean in $s \bar{u}, b h u \bar{u}$, etc., and the latter in $r \bar{u}$.

In the box-headed Vākātaka script of Central India, a downward vertical, bent twice to form an open rectangle, with a long slantingly curved or short horizontal stroke to top, is added to the letter to represent this sound. In the case of letters, like ta, bha, na, etc., the lower end of the vertical is bent upward to right and a stroke added to the vertical to the right. In the case of letters, like $p a, s a, h a, s a$, etc., the vertical is prolonged downward and bent to the left, and a long slantiug ourved stroke is added at its top base. In early Pallava of the 5th century A.D., one variety is the sweeping downward curve with a central stroke,as in $g \bar{u}$, and $b h \bar{u}$, another a downward vertical, bent and continued upward parallel, with a long curved stroke at fts top, as in $p \boldsymbol{u}$ and a third composed of two small slightly curvilinear horizontal strokes added to letters like $k a, r a$, etc. In the early Western Callukyan of the 6th century A.D., the downward vertical which shoots up again, curves at the top to right near the serif to form this sign, as in $b h u$, or to left even below the base line as in $p \boldsymbol{u}$. In Eastern Cälukya of the 7th century A.D., and even in the 10th century A.D., the same are repeated. In Kākatíya script of the 12th century A.D. a small sign already observable in 10th century Eastern Cālukyan $k \notin \mathbb{d}$ develops into a sigu almost like a reverse ' $S$ ' laid on its face. The starting point of this sign forms a sharp anyle, instead of a curve, in Reḍdi script of the 13th century A.D.

In early Pallava Grantha a sweeping carve around the double vertical ' U ' sign below the letter, as in $d \tilde{u}$ and a double arch inside the sweeping curve, as in $\dot{\delta} \tilde{u}$, make up this sign. The downward double vertical with a long horizontal stroke to left, terminally curved, as in mü and $d h u$, and a triple curve horizontally to left, to right slanting downwards and again to left horizontally, as in $\delta \hat{u}$, represent the sign. In the 11th century Cola script the double vertical below the letter has a sweeping curve, double-arched, at the rlght and encircling it, as in $m u \bar{u}$.
$R$ medial.-This medial (Fig. 29) in its earliest form may be seen as it occurs in Uşavadata's inscriptions, where it is a curve added beneath letters having a base line, as ip vr, or to the vertical stroke running downward at some point in the middle, as in kr. In Kgatrapa inscriptions of the 2nd century A.D., it is similar. In the time of the Pallava Prakrit inscript tions of the 3rd-4th centuries A.D. $\boldsymbol{r}$ medial is a hook with long stalk added below the letter as in br.

In Gupta script of the 4th century the curve added beneath the letters is reversed, as in $k r, h_{r}$, and in the inscriptions of Yasodharman and later Nagari medial $\boldsymbol{r}$ is like a reversed upturned query mark without a dot, added to the base or lower end of vertical of letters, as in vr, kr, gr., etc.

In the box-headed Vākātaka inscriptions the sign is as in the earliest Prakrit Pallava charters, except that the curve is more graceful and is actually a pronounced curl rather than a curve. This ocours with a less pronounced curl in Western Cālukyan script of the

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6th century A.D. In Eastern Callukyan script of the 10 th century A.D. the curl becomes more graceful and prominent than ever, and a stroke leading on to the final curl undulates gracefully and continues so in Kākatīyn and later scripts of Telugu.

In early Pallava Grantha of the 7th century A.D. almost the same form of the medial continues, with the curl changed into a broader curve beneath the letter. In the 8 th century Pallava Grantha the stroke leading on to the final curve straightens but changes again in Coḷa script of the 11 th century A.D. In this script the old form is the usual type but there is also a special form, as in $k r$, where the reversed curve as in Nugari runs across the letter in continuation of the curved crose stroke.

E medial.-In Mauryan script of the 3rd centary B.C. this (Fig. 30) is represented by a stroke added to the top left. In Kuspann script of the 2nd century A.D. this slants upward to left. In Uşavadāta's inscriptions and in those of the Kşatrapas and Sātavāhanas it is just a top left stroke as before. In the Ikşväku lettenu of the 3rd century A.D. this stroke slightly curves terminally and more so in the letters of Pallava Prakrit charters and sometimes even slants, as in $m e$.

In the Gupta script of the 4th century A.D. the sign is both the upward slanting stroke to left as in $m e$ and the usual horizontal stroke sliglitly curved terminally. In Yasodharinan's inscriptions a long stroke gracefully shaped like a feather, either slanting up or horizontal, represents this sign, as in no and he, as also a short curvo to top of the letter, as in dhe. These strokes curve gracefully and form the shape of streamers or banners above the letter's serif in Harsvarddhana's inscriptions. In the 9th century Pratïhãra script the simpler, slightly terminally-curved, horizontal stroke to left is the only one present. In Paramāra script of the 11th century A.D. a gracefully curved, slanting upward stroke and a vertical to left represent this sign. Both are present in the Sena script of the next century.

A small terminally-curved leftward top stroke represents this sign in the Vākāţaka reript of cthe 5th century A.D." The stroke is slightly longer in contemporary Pallava script and another variety is the broad curve enveloping the letter to the left. In the Western Cälukyan letters of the 6th century A.D, the sign in the Väkātaka script is repeated. In Eastern Calukyau script of the 10th century A.D. the leftward stroke is curved up to run right and curves up terminally. This reversed slanting ' S '-shaped sign continues in Kākatīya script; and it appears less slanting in Reḍḍi inscriptions.

In Pallava Grantha script of the 7 th and 8th centuries a curve to left, terminally almost curled, before the letter, indicates this medial sound. In all the later scripts the curl becomes more definte. The development is the same in Tamil script as well.

Ai medial.-Two top horizontal strokes to left represent this (Fig. 30) in Mauryan soript. In Kusãn script these are slanting to top. In 2nd century Kspatrapa script the two horizontals to left are present.


In the Gupta script the Kuṣān type is continued. In Yasodharman's inscriptions upward slanting feather-shaped stroke and the small curved stroke to left together make this sign. In Harssvarddhana's inscriptions, of the same two strokes, the feather-shaped one changes into a streamer-shaped one. In the 12th century Sena script the two signs that individually denote $e$ conjointly denote ai.

In the Vākātaka inscriptions of the 5th century A.D. two small terminally-curved leftward top strokes make this sign. In Pallava script of the 5th century A.D. one terminallycurved horizontal stroke and a curve slanting downward represent it, as in hai, rai. In Western Cälukyan of the 6th century A.D. the form of the sign occurring in Vākātaka is almost repeated. In Eastern Cälukyan of the 10th century A.D. and later in Kākatïya, the reversed slanting ' S '-shaped sign above the letter, together with a horizontal stroke below, curved upwards to left, make up this medial. In the Reddi script of the 13th century A.D. the $e$ sign on top of the letter and an acute-angle shaped sign below to the right, give the medial.

In Pallava Grantha script of the 7th century A.D. and in the later varieties, the e sign is repeated one below the other, to the left, beside the letter and this is continued in all the later varieties of the script. In Tamil of the 7th century it is a double-looped curve to the left and it is so in all the later varieties.
$O$ medial.-In Mauryan script this (Fig. 31) is composed of two strokes, making up e and $\overline{\mathbf{a}}$ added to the letter. To letters like $n a$ or $y a$ it is added at the top to right and left of the vertical one slightly below and another above. In letters like bo they are added in the middle to left and right. But in Kusān where the two strokes slant up and form V shape or the shape of an indistinct flying bird at a distance in a picture, the strokes are immediately on top of $b a$ to form bo, and normally also in to. In the inscriptions of Usavadāta, as in so, go bho, etc., the two small horizontal strokes run in one line. The same two strokes continue in Kṣatrapa and Sātavāhana inscriptions. In Ikģvāku inscriptions the strokes show a very slight tendency to curve and this is clear in the Pallava Prakrit inscriptions of the 3ra-4th centuries A.D. In some special cases as in jo the curved left stroke is added to the peculiarly norned $j a$ and similarly the vertical top of $l a$ is looped to left and the stroke continued to right to form $l o$.

In. Gupta script of the 4th century A.D. two curved strokes to right and left above the letter as in $n o$ or $t o$, ordinarily give this sign. But in some peculiar cases, like to and go, it is the normal stroke to left and the peculiar sign added to $!a$ to right and a top vertical and a curved right stroke added halfway up to the right vertical of $g e$ that give this medial. In Yasodharman's insoriptions both the simple and ornamental strokes for $e$ and ã combine to produce this. Similarly in Hargvarddhana's inscriptions of the 7th century A.D. One of these varieties produces a lovely horn-shaped design over the letter, as in $\begin{array}{r}\circ \\ 0\end{array}$ or ko. In Pratihära, Paramära and Sena scripts the same principles is adopted to produce the sign. In the Paramãra inscriptions one variety shows an upward stroke to left and a vertical

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stroke to right ; another shows both the strokes as verticals to right and left. The latter occurs in Sena inscriptions of the 12th century A.D.

The terminally-curved short horizontal strokes to left and right occur in Vākāţaka and Pallava inscriptions of the,5th century A.D., as also in Western Cablukyan inscriptions of the next century where their curvature is greater. In Eastern Calukyan script of the 10th century three strokes, i.e., top and right side strokes as in yo, left side and downward strokes as in ro, and double-arched top stroke as in $l o$, are to be noted. The first and third are continued in Käkātiya and Reḍḍi inscriptions, with this modification that in the first the top stroke tends to get diminutive and the side stroke longer, while in the other the doublearch terminal curves broadly with a flourish.

In Pallava Grantha of the 7th century A.D. the curl to left and wavy vertical above crescent to right top of letter, represent this medial and in the next century both these signs are present to left and right, but the latter of the two becomes just a straight vertical beside the letter and not on a crescent at the top. In the Cola script of the 11th century A.D. this vertical becomes hooked at the top which appears more angular in the Vijayanagara script of the 15 th century A.D.

Au medial.-In the early Prakrit inscriptions this letter (Fig. 31) does not appear. But it appears in the early Sanskrit inscription of Kaptrapa Rudradäman. It is either composed of a slanting top stroke or a horizontal stroke to left, added to the sign making up the medial o. Thus sau is so with the addition of a slanting top strbke. In pau there are three horizontal strokes, two to left and one to right. Nau is somewhat peculiarly formed.

In the Gupta script of the 4th century A.D. a top vertical is added to the double-arched sign at the top of the letter. In Yasodharman's inseriptions these three strokes are feathershaped to left, streamer-shaped and upward to right and comma-shaped to right level with serif. In the inscriptions of Hargavarddhana there is a central vertical stroke between the two horn-shaped signs at the top of the letter above the serif. A vertical to right small horizontal to left in continuation of the serif and a top stroke make up the medial of the Prats hats seript. In Paramära and Sena scripts of the 11 th and 12th centuries respectively the vertecals to right and left and the top stroke running to left produce this sign.

In the box-headed Vākātaka script the small curved horizontal stroke to left in nantinuation of the top line ayd a hook added above to top right of the letter produce this medial sign. It is the same in early Pallava and early Western Cālukya of the 5th and 6th centuries respectively. In the Eastern Callukyan inscriptions of the 10 th century A.D. both these signs combine and there stands distinctly above the letter the small stroke to left appearing as a hook lowered, the whole sign hence looking like two hook-heads attaohed to each other. In the Käkatiya script of the 12 th century A.D. the hook to the seft dwindles, while the one to the right becomes larger. In the Reḍdi script of the next


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century there are two varieties of this sign; one like medial $o$ but with small sign of medial $e$ repeated at the root of the long $\bar{a}$ sign as in mau; and another without this small sign of modiale separately to right top as in tau.

In Pallava Grantha of the 8th century A.D. this sign is almost like medial o except that the vertical stroke to right is double arched. In the Colas script of the 11th century A.D. and onwards the double arch is transferred to the top left of the vertical which is straight and is in continuation of it.

Ka.-This (Fig. 32) is a simple cross in Mauryan script of the 3rd century B.C. In the Bhattiprolu script of the same date there is an additional small top stroke to the right which in the normal script would represent elongation of the vowel element. In this letter from the Tamil caves of the same age this stroke is absent. The lower end of the vertical stroke is lengthened in Kuṣăn, Kẹatrapa and Sätavāhana inscriptions of the 2nd century A.D.; it curves slightly in the Sãtavāhana and pronouncedly so in the Kspatrapa letter. The top end is thickened and the cross stroke slightly curves in the Kssatrapa letter. In the letter in the Ikspāku inscriptions of the 3rd century A.D., the lower end of the vertical stroke is unusually long and curls up tremendously. The northern type of Gupta script of the 4th century A.D. shows this letter as a slight development from that of earlier Kusān while the contemporary Central Indian Gupta variety gives a box-head to the letter and a curve and parallel upward stroke to the elongate lower end of the vertical stroke. In Kadamba inscriptions of the 4th and 5th centuries A.D. the letter is similarly gracefully slender and elongate and has a box-head top, the lower end of the vertical stroke not only forming hook shape but running up parallel half way to the main stroke. This continues in the Western Ganga letter of 5th, 6th centuries A.D., where however the length of the letter is dininished, the top loses the box-head but gains a serif, the cross stroke curving at either end. In Vākātaka inscriptions of the 5th century A.D., Somavamsi inscriptions of the 6th, 7th centuries A.D., Nala inscriptions of the 5th century A.D. and the Eastern Ganga inscriptions of the 7th century A.D.,the box-head is very pronounced in the former two and less in the rest ; the lower end of the vertical stroke in all these varieties as also in the Maitraka letter of the 6th century A.D., forms sharp angles in its bend and slight parallel upward course.

In the Sālankāyana inscriptions of the 4th century A.D., and early Prākṛt Pallava nscriptions, the letter develops a hook-shaped lower end and in the former a serif on the top. In the latter the cross stroke curves down at either end. In Vispuukundi and Pallava inscriptions of the 5th and 6th centuries A.D., respectively, the letter continues its hook-shaped lower end with a thickened top.

The earliest Nagari type may be recognised in Yáodharman's inscriptions, though segular features are better observed in the 7th century A.D. The letter in the script of Uarsavardhana's inscriptions has a nail-headed serif and the lower end of the vertical shoots
up a little to form an angle, while the cross stroke flows to the right obliquely. In contemporary Pallava script the cross stroke is in continuation of the tip of the lower end of the vertical, sharply shooting up, and this continues in one form or other in all later developments. The nail head is pronounced in the Western Cajukyan letter of the 8th century A.D., and in the Paramära letter of the 11th century A.D.; the curve of the oblique cross stroke is pronounced in most letters thereafter though lengthened in Pratíhära inscriptions of 9th century A.D., and compressed in Candella inscriptions of 11th, 12th centuries A.D. The oblique stroke curves out slightly at the tip in Räṣtrakūta inscriptions of the 9th century A.D., Gujarat Cãlukya, Paramãra, Candella, Western Cälukya, Eastern Gañga inscriptions of the 11th century A.D., Gähadavāla inscriptions of the 12th century A.D., and Yãdava inscriptions of the 13th century A.D.

In Canarese inscriptions of very early date from Western Cālukya area of the 6th century A.D., the lower parallel stroke joins the cross stroke and forms the shape of the letter which continues in the 9th century in Rästrakûṭa inscriptions. In Western Cälukya and Hoysala inscriptions of the 11 th and 12 th centuries A.D. respectively, the form of the letter resembles contemporary Eastern Cälukya and Käkatíya letters, respectively. It has however to be noted that in the Hoysala letter the cross stroke is rather elongate.

In Eastern Callukya inscriptions of the 7th Century A.D., the letter is much the same as in Vispukundi and Pallava inscriptions of the two preceding centuries, though three centuries later in inscriptions of the same dynasty the letter is rather rounded and dwarfish; the serif is pronounced, the cross stroke and the compressed hook-shaped lower end of vertical stroke together form a rectangular shape. In the next century the letter comprises three parts, the serif now changed into two strokes meeting at a point on the central cross stroke, and a circle beneath it. It continues like this in the Käkatīya and Reḍḍi inscriptions; the letter is some-what modified and elongated in Vijayanagara inscriptions of the 15th century.

The development of the letter in Grantha and Tamil inscriptions may be seen in Pallava, Cola and Pándya inscriptions. In all these the vertical stroke is doubled in Grantha, while in Tamil it is a single stroke. In Pallava Grantha of the 7th century A.D., the parallel vertical strokes are joined at both ends and the cross stroke curls down on their side. This pontinues in Pallava inscriptions of the 8th century A.D., and the Cola inscriptions of the 11th century A.D., and even in the Pāṇdyan inscriptions of the 13th century A.D., though in the last mentioned the stroke connecting the parallel vertical lines is lengthened at the bottom and curved out at top, the letter itself being compressed and made short or stunted. In the Vijayanagara inscriptions of the 15th century the letter is modification of this Pänḍya type. In Tamil inscriptions of the Pallavas of the 7th and 8th centuries A.D., the letter is very simple with a single elongate vertical stroke, the crose stroke and thickened top. In Cola inseriptions of the 11th century the thickened top develops a book-shape. In Cola inscriptions of the 13th century the letter is compressed an in
contemporary Grantha script but it lacks the additional vertical stroke that we find in Grantha. In Vijayanagara script of the 15th century the lower end of the vertical stroke and one end of the cross stroke, both of them curved, combine to the left to form a letter which has not changed its form ever since. In Vațeluttu script of the 8th and 11th centuries, in inscriptions of the Pānḍyas and Colas respectively, the features noted in contemporary Tamil script continue, though these letters are oblique and the cross stroke curls up towards the right in the Vatteluttu letter of the 8th century A.D.

Kha.-This (Fig. 33) is shaped like a hook with a dot at its lower end in the Mauryan script of the 3rd century B.C. In contemporary Bhattiprolu script the hook lacks the dot but has a stroke added to its top right. In the Kuṣān and Ksatrapa scripts of the 2nd century A.D., the hook develops a large triangle at its lower part. In contemporary Sātavāhana script the hook has a stroke at the base to the right which gives it the appearance of Arabic number 2. In the Ikssvāku inscriptions of the 3rd century A.D., the hook is more like a query without the dot below. In the Gupta script of the , 4th century A.D., the hook and triangle composing the letter have developed from the Kusan script and this feature of the letter is present in inscriptions of Yasodharman of the 6th century A.D., Traikūtaka inscriptions of the 5th century A.D., and Maitraka inscriptions of the 6th century A.D. In Kadamba inscriptions of the 4th and 5th centuries A.D., Vākãtaka, Western Ganga and Nalla inscriptions of the 5th century A.D., the triangle is replaced by a narrow rectangle, a feature that continues in the Somavamsi inscriptions of the 6th and 7th centuries A.D. In the Pallava Prakrit inscriptions of the 3rd, 4th centuries A.D., the belly of the letter is shaped more like a triangle than a rectangle and in Sālankãyana script of the 4 th century the letter is crescent shaped. In Viṣnukuṇdi inscriptions of the 6th century A.D., the letter is a hook with a stroke to the left at its base.

The earliest Nagari variety, as may be seen in the inscriptions of Harsavardhana and the Pallavas of the 7th century A.D., is an advanced development from the hook and triangle of Yasodharman's time. The hook itself bends double, thickens at the top end and the triangular part assumes the shape of a half leaf. The thickened top end which is bent downwards to the left has sometimes the shape of a shovel, sometimes that of a bean, and sotnetimes of two strokes forming a wide angle. The leaf-shaped part of the letter similarly changes its contour sometime into that of a semi-circle against the vertical stroke to the left. The shovel-shaped stroke is present in Rästrakūta script of the 9th century A.D.and Paramãra script of the 11th century A.D. The bean-shaped arm of the letter is present in Pāla script of the 9th century, Eastern Ganga script of the 11th century A.D. and Gähaḍaväla script of the 12 th century A.D. The arm composed of 4 wo strokes forning a wide angle is present in the letter of the Pratīhära script of the 9th century A.D., Candella script of 11th, 12th centuries A.D., Western Cälukya script of the 11th century A.D., Yādava and Käkatīya


Fig. 33
os. det.
scripts of the 13th century A.D. and Vijayanagara script of the 15th century A.D. This arm is shaped like a double-bent hook in Sena script of the 12 th century wherein the semicircle or leaf-shape against the vertical stroke to right is absent. In Vijayanagara script of the 15th century A.D. this semi-circle is replaced by an oblique stroke at the top right which forms a triangle with the vertical and top strokes.

In Canarese inscriptions of very early date from Western Cālukyan area of the 6th century A.D. the letter is more or less like that in Western Ganga script of about that time, except that the narrow rectangular belly is transformed into a loop. Further development of this letter in Rästrakūța script of the 9th century A.D., Western Cālukyan script of the 11th century A.D. and Hoysala script of the 12th century A.D. is a hook which forms a loop and continues an additional upward stroke with a flourish.

The hook and loop in the Eastern Callukyan script of the 7th century A.D. representing this letter change in the Eastern Cālukyan script of the 10th century A.D. and become almost like the Rāstraküta or Western Cālukyan letter of about the same time, the upward side stroke having a serif-like thickened top end. The letter in Käkatīya, Reḍdi and Vijayanagara însoriptions of the 12th, 14th and 15th Centuries respectively continues in almost the same form.

In Grantha script of the Pallavas of the 7th century A.D. there are two varieties the hook with loop and upward side stroke and the hook with strokes almost forming a triangle. In the next century the letter in Pallava script is a hook with triangular belly. In Cola script of the 11th century A.D. the hook is shaped more like the coil, and the triangular part opens out somewhat, as one of its sides does not actually join another. In Pāndyan and Vijayanagara script of the 13th and 15th centuries A.D. the hook expands lownwards into an elongate curl and the triangle opens out more.

Ga.-In Mauryan script of the 3rd century B.C. two strokes meeting at the top compose this (Fig. 34) letter which looks like the letter V inverted. In Bhattiprolu script this letter. has an additional top stroke to the right which in ordinary script of the time represents elongation of the vowel element. In Kuṣān, Kşatrapa and Sātavāhana inscriptions of thè 2nd century A.D. and Ikg̣vāku inscriptions of the 3rd century A.D. the letter is more or less. these-shoe shaped. In the northern variety of the Gupta script of the 4th century AD. atmall base stroke is added to the arm of the horse-shoe to the left while the arm is elongated gigwnards to the right ; in the southern variety of Gupta script the arm of the letteris wived inwards to the left and he top flattened a bit. While in Traikūtaka script of the 5th century A.D. the horse-shoe shape still appears without change, a box-head appears above the flattened top of the letter in Vākātaka and Somavamsi inscriptions of the 5th and 6th7th centuries respectively, the flattened top of the letter being marked by a small thicker stroke in all the other letters of the 4th and 5th centuries A.D., like Kadamba, Śälankāyana, Pallava, Western Ganga, Nala, Visnukuṇdi. It continues so in Maitraka script of the 6th century A.D. and Eastern Ganga of the 7th century A.D.


Fig. 34.

The letter of Yasodharman's time is a development from the northern variety of the Gupta script, but in the regular Nagari of the seventh century A.D., as seen in the inscriptions of Harsavardhana and the Pallavas, the flattened top, the straightened right arm and the left arm with pointed loop end show considerable advance in its development. The flattened top of the letter continues in all letters of the Nagari variety, except in Western Cajukyan of the 8th century A.D., Pāla of the 9th century A.D., Eastern Ganga of the 11th century A.D. and Sena of the 12 th century A.D. The left arm of the letter is leaf-shaped in Pratíhāra script of the 9th century; triangularly curved resembling a shovel in Rāṣtrakūṭa script of the 9th century A.D. and Paramära script of the 11th century A.D.; has a bean shaped tip in Western Cälukyan script of the 8th century A.D., Pāla of the 9th century A.D., Candella of the 11 th -12 th centuries A.D. and Eastern Ganga of the 11th century A.D. This arm ends in a small circle in Western Cälukyan of the 11th century A.D., Gähaḑavala of the 12th century A.D., Yädava of the 13th century A.D. while it enrves out without actually forming a circle in Kākatiya and Vijayanagara inscriptions of the 13th and 15th centuries respectively. In all these the right stroke is usually straight or slightly slanting to right.

In early Canarese inscription from Western Cälukyan area of the 6th century the letter is horse-shoe shaped with the left arm curving inwards. In addition to this feature in the compressed dwarfish letter of the Rāstrakūta script of the 9th century A.D. a light serif stroke is added on top, which later, in the Western Calakyan and Hoysāla script of the 11th and 12 th centuries A.D., curves up like a cresoent. In the two latter scripts the inward curve of the left arm is absent.

The horse-shoe shape with slightly flattened top of this letter in the Eastern Cälukyan inscriptions of the 7th century A.D. has a separate nail-head scrif added above it in the same script of the 10 th century A.D. This serif shoots up into two divergent strokes in the next century and looks like the letter V above U inverted. In Käkatīya, Reḍdi and Vijayanagara inscriptions of the $12 \mathrm{th}, 14$ th and 15 th centuries A.D. respectively, this is changed into a crescent above the horse-shoe.

In Grantha script of the Pallavas of the 7th century A.D. the letter with serif is somewhat like the Eastern Cālukyan letter of the 10th century A.D. Another variety of the same time lacks a serif but adds to itself an additional upward-curved stroke to the left. In the Pallava script of the 8th century A.D. the arm of the letter is vertical to the right while the additional curved stroke to the left is present, the serif is absent, and from now onwards there is no serif for the letter in the subsequent centuries. The shape arising from the addition of the curved stroke to the left is modified in the letter of Cola script of the 11 th century A.D. to form a hook-shape and the arm to right runs downwards to right and again to left obliquely This form of the letter continues in Pāndya script of the 13th century A.D., though in the Vijayanagara script of the 15 th century A.D. the angularities are softened inte curves.


Fig. 35.

Gha.-In Mauryan script of the 3rd century B.C. this (Fig. 35) letter is shaped somewhat like a fishing hook with a central stroke which gives it three prongs, the one to the extreme left being elongate. In Bhattiprolu script of the same time it is shaped like an oblique reversed with a stroke to the top right. In Kuṣãn, Ksatrapa and Sātavāhana letters of the 2nd century A.D. it is three pronged. In the first and last the middle prong is smaller while in the Ksatrapa letter all the prongs are of equal length. In the Kuṣan letter the semi circular base gets flattened and the whole letter looks like E lying on its vertical stroke. In the Ksatrapa letter the stroke to the extreme left has a small undulation while the Sātavāhana letter is still a semi-circle with central stroke. The strokes in Kṣatrapa and Sātavāhana letters are thickened somewhat at the top. In the Ikṣväku letter of the 3rd century A.D., the prongs are elongate. In the Gupta script of the 4th century A.D., the bottom line is slightly oblique, the central stroke somewhat to the right and the stroke to the left thickened at its top. In the Central Indian variety of the same script of the letter is of trident shape with a triangular nail-head for the left prong. In the script of Yasodharman's time the letter is more like W, but in inscriptions of the Kadambas of the 4th and 5th centuries A.D., of the Sälankāyanas of the 4th century A.D., of the Pallavas of the 3rd and 4th centu ries A.D., of the Vākātakas of the 5th century A.D., of the Western Gangas of the 5th-6th centuries A.D., Maitrakas of the 6th century A.D., Somavamkis of 6th-7th centuries A.D., Eastern Gangas of the 7th century A.D. and Vispuukundins of the 6th century A.D., the trident shape of the letter with somewhat elongate arms in many cases continues with the left prong, bulging out somewhat and receding again to take an upward course before finally getting thickened at the top or developing a serif or wearing a box-head.

In early Nagari of the 7th century A.D., the three prongs of the letter continue, a serif, is added to the top of the bulging left stroke and the stroke to the right runs down a little to form the usual lower stroke so common in most Nagari letters. In Western Callukyan Nagari script of the 8th Century A.D. the pronga have a triangular nail-head at the topi In Pratīhāra, Pāla and Rästrakūta script of the 9th century A.D. the prongs are still clear, the serif becomes larger and the downward stroke is prominent. In all later varieties of Nagari the serif is changed into a full top stroke, the right prong into an elongate side stroke, the central stroke dwindling and the left stroke bulging out and receding into form the contour of a trude animal head.

In early Canarese inscriptions of the Western Cālukyan area the letter is developed from the Western Ganga letter of the 5th-6th centuries A.D. and in the Rãstrakūta letter of the 9th oentury the bulge of the left prong is very prominent, the letter itself being broad and short. In Western Calukyan script of the 11th century the serif changes into small crescent and the link between this and the bulging arm of the letter to the left is lost. This bulging arm to left takes a double bend at the base and the right arm perches itself towards the top end of the central arm which is the only one prominent in the. letter of the Western Cąlukyan and Hoÿsala scripts of the 11th and 12th centuries A.D. respectively.

The Eastern Cālukyan letter of the 7th century A.D. is not very different from the earlier Viṣnukuṇḍi letter and the serif is rather more prominent in the Eastern Cālakyan letter of the 10th century A.D., the letter itself being rather broad. In Eastern Cäjakyan script of the 11th century A.D., the letter is somewhat like that of contemporary Western Calukyan but the crescent serif is here a double stroke shaped like V. In the Kākatiya and Vijayanagara scripts of the 12th and 15th centuries A.D. the letter is just like the one in Hoyssla script of the 12 th century, though in Reddi script of the 14 th century A.D. the right prong issues from the base and is as long as the middle one.

In Pallava Grantha of the 7th century the letter is not very different from that of earlier Viąnukuṇdin or contemporary Eastern Cälukyan. This shape almost continues to be so in the next century, though in Cola, Pāndya and Vijayanagara scripts of the 11th, 13th and 15th centuries A.D., respectively the letter is rather broad with a straight baseline, two strokes for the central and right arms, the left arm being shaped like a query without the the dot.
a.-In the Mauryan alphabet this letter (Fig. 36) is practically a square with the right side open. It is practically the same in the Kușãn inscriptions of the 2nd century A.D. In the Gupta script of the 4th century A.D., the northern form of the letter follows the Kuşān type but the southern variety shows a small inward dip in the vertical and a small downward projection of the tip of the top stroke to right. This is repeated in Kadamba script of the 4th and 5 th century A.D. The letter is nearly similar in Sàlankāyana script of the 4 th century A.D., Western Ganga (5th century A.D.) and Viṣnukuṇdin of the same time. The early form of the letter is maintained in Vākātaka (5th century A.D.), and Maitraka (6th century A.D.) alphabet as also in Eastern Ganga (7th century A.D.).

The letter of Yaśodharman's inscriptions (6th century A.D.) is developed in the next century by emphasis on the dip both in the vertical and the base which continues in later forms. In Eastern Ganga (11th century A.D.) and Sena (12th century A.D.), Nagari inseriptions the letter shows a circlet to the right top.

The Pallava Grantha letter of the 7th century A.D. gives a clue to understanding the later development of the letter in Telugu script. The development is much as in $j$ as the dip in the vertical forming curves at the top and the base decide the form of the letter:

In Pallava Grantha letter of the 8th century A.D., the vertical stroke is lost by the intrusion of a diagonal stroke which continues thereafter to connect the top and base of the letter.

In Tamil the projection of the left end of the base and the curwes of the vertical stroke already observed in the 7th century Pallava script form the basis for a series of transformations that finally settled the letter in the Cola and Vijayanagar inscriptions.

Tho Vatfeluttu letter follows the form of the Tamil letter.:


Ca.-In Mauryan script it (Fig 57) is a semi-circle, with the vertical stroke double its diameter to the right, giving the letter the appearance of a reversed P upside down. In contemporary script from the Tamil caves it is similar, but in Bhattiprolu script the vertical stroke slightly projects downwards and a stroke is added to top right which in ordinary script would signify lenthening of the vowel element $a$. In Kuṣãn, Kşaṣtrapa and Sātavāhana of the 2nd century A.D. the belly of the letter bulges forward to assume the shape of an orange cell, the vertical stroke dwindles, a small thick knob towards the right top being all that is left of its whole length. In the Kusãn letter the knob is more or less a serif stroke. In Ikşvāku script of the 3rd century A.D. the letter looks more compressed. The Northern variety of Gupta letter of the 4th Century is like the earlier Kuṣān one, while the Central Indian type of letter shows a box-head. In Kadamba, Vãkätaka, Somavamsi, Nala and Eastern Ganga scripts of the 4th, 5th, 6th-7th, 5th and 7th oenturies A.D. respectively the belly of the letter is more or less rectangular and the box-head clearly crowns the vertical stroke that again rises up. In Sálankāyana, Western Ganga and Viṣnukuṇdi, letters of the 4th, 5th - 6 th and 6 th centuries A.D. respectively, the serif to the left is clearly marked and in all thgse, as also in the Pallava letter of the 4th and 5th centuries A.D., the base line undulates to form a double-curve. The Traikūtaka letter of the 5th century A.D. is somewhat shaped like a triangle, with a serif stoke to the right top, the Maitraka letter of the next century showing the triangle curving up to form orange cell shape, In the script of Yasodharman of the 6th oentury A.D. the letter resembles a spouted pitcher facing left. In the early Nagari letter, as in Hargavarddhana's incriptions, the letter is derived from that of Yasodharman's, the belly merging into the spout. In Pallava Nagari of the same time the belly of the letter is just half an orange cell, the vertical stroke appears again and slightly projects downwards, its top thick ening into a nail-head. This nail-head is very prominent in the Western Callukyan Nagari letter of the 8 th century A.D. and Paramāra letter of the 11th century A.D. The letter in Pratihāra, Pāla and Rāştrakūta scripts of the 9th century A.D. is almost like that of early Pallava script. The orange cell shape of the belly of the letter occurs in Eastern Ganga script of 11th century A.D. and Gāhadaväla seript of the 12th century A.D. But in late Western Cälukyan (11th century $\mathrm{A}, \mathrm{D}$. .), Gujrat Cälukyan (11th century A.D.), Sena (12th century A.D.), Yädava and Käkatiya seripts(13th century A.D.), the serif becomes a full top stroke, and the belly of the letter seen against the vertical stroke is a triangle.

In early Canarese script of the 6th century A.D. from Western Calukyan area the letter is more or less like that of Western Ganga script of the 5th and 6th centuries A.D. In Răstrakūta soript the 9th Century A.D. the base line undulates tooform a double curve and a serif is present. The Western Cālukyan letter of the 11th centify A.D. shows the serif obanged into two strokes branching off to form an angle,the base line undulating to form a double curve and the belly opening near the serif stroke and a small upward beak-like stroke-


EIn. 37
to right gives the letter almost the shape of a kettle. This is the shape of the letter in Hoysala script of the next century.

This shape continues in all the varieties of Telugu soript form this time onwards but the serif atrokes so prominent in the 11th century A.D. soften into cresent shape from the 15th century onwards.

In Grantha of the 7th century A.D. the letter is much as in earlier Pallava script of 4th and 5th centuries A.D. The thickened serif-like top is slightly forked in one type and the belly somewhat bulges up more to the left. The shape of the belly is somewhat like a triangle in the 8th century A.D. and from the 11th century A.D. the letter is composed of a curl that stands against the base line which has a slight curvature and a short vertical to the right.

In Tamil the Pallava letter of the 7th century A.D. is like the Afokan letter with a small thick top knob. In the 8th century the knob disappears and the belly opens a little. In the Cola letter of the 11th century A.D. a small stroke appears in the place of the knob of the 7th century A.D. This develops in the 10th century T shape and the opened belly joins again ; later in the Vijayanagara script the top stroke of the T-shaped part shoots down and cuts an angle to the left.

In Pāndyan Vatteluttu soript of the 8th century A.D. the letter is oblique and looks a svastika with the left and downward stroke joined. It is much the same in Cola script of the century A.D. thought the slight topward curve of the right stroke is absent.

Cha.-In the Mauryan script this (Fig. 38) is a long vertical stroke, the lower half of which divides an oval or elipse into two equal parts. In Bhattiprolu soript as usual a top stoke is added to the right. In Kuşan, Kṣatrapa and Sātavāhana script of the 2nd century A.D. the letter is dwarfish and the two cells of its oval belly develop into two olosely-knit spheroids with a central Vertioal stroke above, with its top end thiokened. In Ikşvāku soript of the 3rd century A.D. the letter is composed of an elogate oval to left crowned by a enall orescent closely connected with an oval or elipse. In Gupta script of the 4th cenary A.D. from Central India a box-head crowns the small vertical which is sligheriy Wh the left. In the letter of Yasodharman's time the two spheroids are a little apart bat onnected by the central stroke which has a thick serif-like top. The letter in all the earig scripts of South India and Deccan, like Kadamba, Sālankāyana, Pallava Vig̣nukuṇdia, and early Western and Eastern Cālukyan, is corainosed only of these two spheroids, now ahaped like pears, the top of the left one among them being a little more pointed and raised than the other. The early Nagari letter of the 7th century A.D. in Pallmas inscriptions is not very different from the letter of Yasodharman'sinsoriptions. Erom this time onwards the letter is more or less a circle or elipse laid on its back divided intie two equal halves by a etraight or slightly curvilinear vertical stroke with a top serif and in some casee small downward projection


In early Canarese script from Western' Callukyan areathe two pear-shaped part.c. composing the letter in the 6th century Cälukyan script, get flattened out in the Rästrakuṭa letter in the 9 th century A.D; but in the 11 th century Western Cälukyan seript it beenmes an almost circniar form like two coils of a spring forming a central loop, the right cond lieing surmounted by a small arch-shaped serif. This and a modified form of the earliest Wintern Callnkyan letter occur in Hoysala script of the 12th century A.D.

In the earliest Eastern Callukyan script the letter resembles its Western contemporary. But in the 10th centary one of the pear-shaped cells opens at the top end and in the next oentury an arch-shaped serif is added to the top of the arm to the right. The lattor in the Käkatiya and Reḍdi scripts of the 12th and 13th centuries A.D. is more or tewn akin to that in Western Cälukyan and Hoysala script of the 11th and 12th centuries A.D.

In the Pallava Grantha letter of the 7th century A.D, there are two varietien foth based on the earlier Pallava type of the 5th century A.D. In the 8th century A.1). we of地e spheroids dwindles and the other opens out. In the Cola seript of the IIth rentury A.D.and onwards the letter is like unaspirated $c a$ with the arm to the right, at fir arving out slightly but later curving out strongly.

Ja.-In Mauryan script this (Fig.39) is like the letter E. The centrai stot stengthened in the Bhattiprolu letter of the same date. The spine of the letter is sometimes straight and sometimes curved in all these varieties during the first few centuries of the Christich era. In the Central variety of Gupta script, Kadamba, Sãlankăyana, Pallava Western (ianga, Nala and Visnukundin scripts of the 4th, 5th, 6th centuries A.D. the top and bottom -trokes endulate to form slight double curve. In the Vākātaka script of the öth century A.D. the vertical stroke recedes inwards above the second stroke and adds a box-head to its top left In Somavamśi script of the 6th, 7th centuries A.D. the box-head is not present. In tha letter of Yasodharman's time the two lower stokes tend to be oblique ; and in the Nagari script of Harsavarddhana's time the short vertical recedes inside above the middle stroke, bath the middle rad lower stokes running down obliquely, the latter even curving a hit to uft the top stroke thickens a bit at its ends and drops down a little to the right.

In the Western Calukyan letter of the 8th century A.D. and Paramāra letter of the with century A.D. the top and vertical strokes combine to change into a triangt. sbove 6Ke middle stroke. In all further developments except in Sena and Vijayanagas ,ripts the middle stroke runs down obliquely or very nearly straight and down in cursive inanner, the other stroke strongly curving in and out again; and with the serif of vertical stroke abovo the middle stroke the letter looks like $\mathbf{T}$ on S. with top end of the letere Iengithened downwards. In Sena script of the 12 th century A.D. the middle line is not obiligue but eurves up to right towards the serif. In Vijayanagara script the middle stroke bends and runs down to form a right angle.


In Canarese script from Western Callukyan area the letter of the 6th century A.D. is not very different from that of the slightly earlier Western Ganga script but a tiny dash across the middle stroke may be noted. This later accounts for the curl-shape to the left of the top stroke of the letter in Räştrakūta script of the 9th century A.D. In the 11th century Western Calukyan script the top line breaks and forms a curl to the left and an upward curve to the right, the central stroke just connecting this part with the stroke forming the base that undulates to form a double bend. This shape of the letter continues in the Hoysala script of the 12 th century A.D.

In the Eastern Calakyan script of the 7th century A.D. the letter is after the earlier Vispukunḍin variety. But in the 10 th century A.D. the letter is more like the Western Cälukyan in the next century, with this difference that the curl to the left actually forms loop and the top end of the curve to the right thickens serif-like. From the 11th century onwards the letter is about the same type as in Western Cālukyan and Hoysala scripts.

In the Pallava Grantha script of the 7th century A.D. there are two varieties of the letter. In the first the top stroke starts with a curl and this along with the other two strokes is wavy forming a double arch, as in earlier examples. In the other one the top stroke starts with a curl, has a double bend, and then obliquely runs down to the left and again to right, forms a loop and a curve in continuation. From this the Pallava letter of the next century is formed. In Coḷa script of the 11th century A.D. and later the letter is only a continuation of this type with the additional curve beyond the loop being absent.
$\widetilde{N} a$. -In the Mauryan alphabet the letter (Fig. 40) is like the letter H with the left vertical extended a little to left horizontally and the right vertical with its upper half omitted. In the Kuşan, Kģatrapa and Sätavähana letters of the 2nd century A.D. the lower end of the left vertical stroke is somewhat prolonged. It is abnormally prolonged and definitely curves to left in the Tkspāku letter of the 3rd century A.D, and the limb to the right tends to curve. This continues in the early Pallava letter of the 3rd and 4th cen, tury A.D. In the Kadamba and Sālankäyana letters of the 4th century A.D., the horizontat top stroke in continuation of the left vertical develops a double bend. In the tormer the lower end of the prolonged vertical curves and shoots up as a parallel stroke. The might limb of the letter from now onwards curves and tends to be hook-shaped as in Vākātaka (5th century A.D.), Maitraka (6th century), Vispukuṇ̣ị (6th century A.D.), Pallava (5th century A.D.), Eastern Ganga (7th century A.D.), and Eastern Cãlukya (7th century A.D.).

In Gupta script of the 4th century A.D. the letter is a simple one lacking the loop of Pallava Grantha letter of the 7th century A.D. and latae in the hemiptions of Yatodharman the form is continued.


Fra. 40.
$O_{6} S_{0}$ del.

In the Telugu area the parallel stroke in continuation of the vertical tends to bulge into a loop as in letter $i$ of the same alphabet in different stages and the hook-shaped right limb gets diminished into a small projecting arc.

In the Granthar script the loop is formed in the 7th century A.D. itself and the right limb starts in continuation of the loop as a curve with a flourish encircling the loop, a shape continuing during later centuries.

The letter is the same in Tamil script as well. The Vattelutin letter is formed after the Trmil one.
$T_{a}$.-From the Mauryan times to practically about the 4th century A.D. this letter (Fig. 41) is a semi-circle shaped like ' C '. From the 4 th century A.D, there is slight change. In Gupta script of the 4th century A.D. the top of the letter is a horizontal stroke. This is found also in Kadamba, Vākāṭaka, Sälankĩyana, Nala and Pallava scripts of the 4th, 5th centuries A.D. though in Vākätaka and Somavamái script of the 5th, 6th and 7th eenturies A.D. respectively a box-head is added. The base of the letter is somewhat straightened and a small undulation gives it a shallow double curve in Sālankāyana Western Ganga, Vig̣nukuṇdin and Pallava letters of the 4th, 5th and 6th centuries A.D. In the script of Yasodharman the top end of the letter has a distinct dot. In the Nagari script of Harsaz varddhana's time the top end of the letter raises itself up and touches the serif added to it, thus giving the contour of half a pot. In nearly all the later forms this appearance continues almost unchanged ; the Paramāra letter of the 11th century A.D., however, has a triangular nail-head instead of the mere top stroke; and in Päla, Eastern Ganga and Sena scripts of the 9th, 11th and 12th centuries respectively the back of the letter has a double bend.

The early Western Cälukyan letter of the 6th century A.D. resombles the earlier Kadamba letter and the Räştrakûța letter of the 9th century A.D. has a shallow double bend in the base line. This feature oontinues in the Western Cazlakyan and Hoysala letters of the 11th and 12th centuries A.D., respectively ; and in addition the top end of the letter is prolonged to shoot up.

In eastern Callukyan script the letter of 7th century A.D. is after the earlier type and ke its earliest Western Callukyan cousin. But in the 10th century A.D. the top end shoote. up into a prominent vertical stroke. In the subsequent centuries this letter of the Telugu soript continues both the top vertical gtroke and the double curve of the base line.

In Pallava Grantha script of the 7th century A.D., one form of the letter is the simple C-shaped one and ariother like ' $L$ ' upside down and oblique or a hocity y-stiok placed handle downwards in slanting fashion. In the next century the lower end of the letter is bent and curved to form a small hook, This hook is enlarged in the 11th century Cola and 13th century Pändya letter which resembles $S$ written slaming with definite angularities:


FIG 41

In the Vijayanagar letter of the 15 th century A.D., the letter is simplified into a downward stroke just slanting to left, then to right and again to left.

The early Pallava Tamil letter of the 7th century A.D., is akin to contemporary Grantha letter composed of a stroke aslant from right to left and again from left to right, with the angle rounded a bit. This form continues till the 11th-12th centuries but in the 13th century Colla script the lower part of the stroke running from left to right lifts itself up to form a straight horizontal line and later in the Vijayanagar letter of the 15th century A.D., the other stroke also strsightens itself into a vertical and the letter consists of two sides of a rectangle forming a right angle.

The Vatteluttu letter in Pāndya script of the 8th century A.D., is more or less a crescent and in the 11th century Cola script it continues the same form except that its base is somewhat flattened.
a-In Mauryan script the letter (Fig. 42) look like H with the top and bottom half of the arms to left and right respectively rubbed out. In the Kuṣān, Kssatrapa and Sātavāhana scripts of the 2nd century A.D., it is shaped like a sickle with handle upwards ; a small serif crowns the Kuṣān letter, In the Ikspvãku script of the 3rd century A.D., the top is thickened wedgelike. In the Gupta letter of the 4th century A.D., which is developed from the earlier Kusaan one the curved lower part straightens itself somewhat vertically. In the Kadamba, Vākaţāka and Somavamsi scripts of the 4th, 5th and 6th-7th centuries, respectively, the letter develops a box-head. In these, as well as in the Sälankāyana, Pallava Vig̣pukuṇḍin, Traikūtaka, Maitraka, Western Cälukya and Eastern Ganga scripts of the 4th, 5th, 6th, 5th, 6th and 7th centuries A.D., repectively, the letter though still sickleshaped has the curved blade-shaped base, slightly 'double bent' and wavy. In Yasodharman's script the letter is shaped somewhat like the numeral 3 with the top line flattened slightly and in the Nagari of Harsavardhana's time the top stroke is clearly a serif. In the 9th century Pāla and Rāątrakûta scripts the letter is more or less like that in Vardhana script but from the 11th century A.D. the letter in Nagari is more or less an ' S ' with the top end continued up vertically a little and then horizontally to left, In the Paramära script of the 11th century A.D. this stroke above the ' S ' shaped part is marked like a nail-head.

In early Western Callukyan script of the 6th century A.D, the letter is still sickleshaped but the base tends to develop a wavy contour, which persists in the successive centuries, till in the Hoysala script of the 12th century A.D. the wavy line curls towards the right end ; the connected serif changes into a separate small crescent,above the letter from the 1lth century onwards.

In the Eastern Cálukyan script the development is like that in Western Cálukyan but in the 11th century A.D. the serif is composed of two strokes shaped like ' $V$ ' rather widened, but from the 12 th century onwards the crescent takes it place


FIG. 42

In Pallava Grantha script of the 7th century A.D, the letter is like the numeral 2 with the horizontal stroke lengthened. In the same script of the next century a dot, a stroke slanting down from right to left and continued as wavy base line, compose the letter. In the 11th century Cola script the dot and slanting strokes combine to look like a hook and the wavy line in continuation is very deep showing a clear double arch which ends as a vertical stroke. From this time onwards the form of the letter is more or less of this type.

Dha.-In the Mauryan script this letter (Fig. 43) is shaped as an inverted question mark without the dot. The base is flattened and the top end somewhat thicker in the 2nd century Kuşăn and Kṣatrapa and Sãtāvāhanā letters. In the southern variety of Gupta script the base curves in as also in Kadamba (4th and 5th century A.D.) and there is a tendency for the right end of the letter to curl which is more pronounced in lator letter of the Canarese, Telugu and Grantha scripts ; the letter is mainly in these areas very like da in the different periods with the addition of the loop through the Vijayanagar Telugu letter has also a stroke added below it.

The letter in the Nagari script of all periods and areas is more or less shaped after the earlier Gupta type which is clearly after its parent letter of the 2nd century A.D. and the curl towards the end of the right end is to be noted.
$a$.-In Mauryan script and in the script of the early Tamil caves na (Fig. 44) has two strokes at the top and bottom connected in the middle by a vertical stroke which give it the appearance of 'H' resting on one of its sides. In Bhattiprolu script a stroke to the right is added at the middle of the vertical. Though in Sātavāhana script of the 2nd century A.D. the letter is more or less the same, the base line of contemporary Kssatrapa letter and the base and top strokes of the Kuṣann letter of the same date and of the Ikṣvạapu letter of the 3 rd century A.D. curve a bit giving the letter somewhat the appearance of ' X ' composed of two crescents joined back to back. The letter in Northern Gupta script of the 4th century A.D. and that of Yasordharman's inseriptions is composed of a small horizontal stroke with both ends rising vertically and curving out in opposite directions. Two small strokes joining to continue as a vertical stroke which branches off to curve downwards in opposite directions compose the letter in Śalankāyana, Viṣṇukuņdin, Pallava, Western Ganga and Western Callukyan scripts of the 4th, 5th and 6th centuries A.D. But as in the Southern variety of Gupta script, in Kadamba, Vākāṭaka, Traikūṭaka, Maitraka, Nala, Eastern Ganga scripts of about the same date one of ethe small strokes at the base changes into a loop to the left ; and in the first two as well as in the Nala letter a boxhead is present where the vertical branches off into two downward curves. In the script of Yasodharman's inscriptions the letter is of the type of the Northern Gupta variety and from this is derived the Nagari letter in Hargavardhana's inscriptions and those of the Pallavas, wherein the strokes composing the curves are lengthened downwards and the small horizontal stroke slants to right. In Western Cālukya and Pratithâra scripts of the $8 t$ hand

te. 3


FIG. 44

9th centuries A.D. respectively the type is the same, though in Pāla script of the 9th century the vertical upward and downward strokes composing the limb to the right change into a single stroke. In contemporary Rāstrakuṭa script the small central horizontal stroke disappears or dwindles into a small stroke which itself branches off to curve downwards in opposite directions. The double curve thus formed at the top is crowned by a horizontal stroke in Gujrat Cälukya, Paramāra and Western Callukya scripts of the 11th century A.D. In Ganga script of the same century the letter is more or less like that of the Pāla script already described. The Candella, Gāhaḍavāla, Yādava, Kākatīya, and Vijayanagara letters of the 12 th, 13 th and 15 th centuries A.D. look like ' $E$ ' with its three strokes facing downwards.

The Western Calukyan letter is more or less like that of contemporary Vispukundin or Pallava script. In Western Cälukyan and Hoysala scripts of the 11th and 12th centuries A.D. the two small strokes at the base form a small curve to the right allowing the vertical to run up curving to left in continuation and develop a double bend and a large curve to right.

In Eastern Cālukyan seript of the 7th century A.D. the letter resembles its Western Callukyan cousin and the later developments during the centuries are quite akin to those in the Canarese area.

In Pallava Grantha of the 7th century A.D. the letter is of two types; one is more or less like the earlicr type of the same script with however this difference that the top left curve is curled and the left stroke at the base is changed into a loop; another is shaped like the profile of a spring xtraightened but still retaining some of the curves. In the 8th century A.D. the letter is formed by a curl to the left continuing as a small horizontal stroke, and then an upward curve which abruptly descends as a straight vertical. In the 11th century A.D. the letter starts as a curl and forms two loops before it descends vertically downwards to some length. In the subsequent centuries this continues.

In Tamil script all the varieties of Grantha are repeated during the centuries.
In Vatteluttu script of the 8th century A.D. the letter starts as a loop, curves to right, bends twice in its downward curve and runs again to left. This form continues in the 11th century $\mathrm{A}_{\mathbf{2}} \mathrm{D}$.

Ta.-In Mauryan script and in the script of the Tamil caves it (Fig. 45) is like ' Y ' upside down; the Bhattiprolu letter has a stroke as usual added to its right. In the Kusān, Ksatrapa and Sātavāhana scripts of the 2nd century A.D. the letter has a thick serif-like top and the two lower limbs curve to form a horse-shee shape. In the Iksvāku letter of the 3rd century A.D. the left lower limb forms a loop. The small vertical over the horse-shos has a wedge-shaped cap in the Northern variety of the Gupta script of the 4th century A.D., though in the Central Indian variety there is a box-head instead. This box-head is found


FIG
45
in Kadamba, Vākātaka, Nala and Somavamśi letters. The looped form at the lower end of the vertical is found in Western Ganga and Vişṇukundin letter of the 5th-6th centuries A.D.

In the letter of Yasodharman's inscriptions the wedge is on the horse-shoe much as in earlier Gupta script and this form is continued in the Nagari of Harsavardhana's time as also in Pallava Nagari of the 7th century A.D., the arm of the horse-shce tending to get shortened to the left and lengthened and slightly curved at the terminal to the right. The Western Cālukya letter of the 8th century A.D. is much the same. In Pratīhāra, Pāla and Rāştrakūţa scripts of the 9th century A.D., Gujrat Cālukya, Western Cālukya, Eastern Ganga scripts of the 11th century A.D., Găhaḑavāla script of the 12 th century A.D., Yādava and Käkatīya scripts of the 13th century A.D., and Vijayanagara script of the 15th century A.D. which show further development of the form, the wedge on top is replaced by a horizontal stroke on top of the vertical, which in the first four and in the Eastern'Ganga letter looks like a small ' $T$ ' on a hook. The Paramāra letter of the 11th century A.D. however has a triangular top and the Sena letter of the 12 th century A.D. looks a cork-screw silhouetted or like the numeral 3 connected to a top horizontal stroke.

The Western Callukya letter of the 6th century A.D. is a vertical stroke with small serif situated on a hook. In the 9th century Rāstrakūṭa script the letter is composed of a ' T ' on a curl. In the Western Cālukyan and Hoysala letter of the 11th-12th centuries A.D. this curl becomes more pronounced and a crescent replaces the ' T ' shaped serif.

In Eastern Cālukyan script of the 7th century A.D. and in the three subsequent centuries the vertical with small serif and the curl give a shape approximating the numeral 3 ; in the 11th century A.D. the serif changes into two large strokes shaped like ' $V$ ' widened; but from the next century onwards it is changed into a crescent as in contemporary Hoysala script. In the Vijayanagara letter of the 15th century A.D, the semi-circular belly of the letter curves in at both ends beneath the crescent.

In Pallava Grantha of the 7th century A.D. this is almost like its predecessor two centuries earlier. The top end of the vertical stroke is slightly forked. This continues in the next century A.D, but the letter is more buxom. In the 11th century Cola script the vertical develope a hook-shaped top and the curve in continuation of the loop descends aslant. In the 13th century Pāndya letter the hook changes into an open rectangle which continues in àt later script.

The development of the letter in Tamil is not different from that in Grantha,
In Pāndyan Vatteluttu of the 8th century A.D. the letter is somewhat like No. 3 with the bottom slightly enlarged and projecting to right. In the Cola script of the 11th century A.D. the lower half of the letter sweeps up as a broad curve to reach the top.

Tha.-In Mauryan script and the script of the Tamil caves it (Fig. 46) is a circle with a dot in the centre. The Bhaṭṭprolu letter has a top stroke added to right. In Kuạann,


Kg̨atrapa and Sātavāhana writing of the 2nd century A.D. and Ikgãaku script of the 3rd century A.D. it is the same circle and dot that make up the letter. In the Northern Gupta script of the 4th century A.D. a slightly elliptical circle with a central dividing line or a circle with central dot make the letter, while in the Central Indian variety the top of the ellipse with central dot is at once flattened and thickened. The Kadamba letter of the 4th-5th centuries A.D. tends to appear somewhat rectangular standing heightwise with thickened flat top and base slightly curved-in centrally and with the central dot as a small circle. The early Pallava letter of the Prakrit charters is somewhat similarly rectangular though the Śälankāyana letter of the 4th century A.D. is an oval but both have the central dot. The Traikūţaka, Väkāṭaka, Western Ganga, Nala, Vişpukuṇ̣̣in and Pallava-all of the 5th century A.D., have flattened and thickened top and all dots in the middle except the first and last which have a larger and small incomplete circlet in the place of the dot; the base of the last two has also the central inward curve ; the Maitraka letter as a small arch in the centre of the oval. The Vākățaka letter and its derivative in the Somavamsi script of the 6th-7th century A.D. have a box-head top and the latter has an arch which forms an upturned boat-shape at the base of the conical flask-shaped letter. The Eastern Ganga letter is like that in Nala script but the dot is replaced by a circlet nearer the lase than the centre.

The letter of Yaśodharman's inscriptions is just an clongated type of the Gupta one with a central horizontal storke across an ellipse. In the regular Nagari of the 7th century A.D., as seen in the script of Hargavarddhana's inscriptions, the letter develops a straight vertical line to right with two closely knit spherules attached to the left, one below another, so that the letter looks like ' B' reversed. It looks similar in Western Cālukyan script of the 8th century A.D., the Pratihāra, Pāla, Rāstrrakūṭa scripts of the 9th century A.D., as also in later scripts where the vertical is lengthened slightly downwards and sometimes slightly curved terminally to right. In the Gujrat Cälukyan letter of 11th century A.D. the top spherule is opened out. In the contemporary Eastern Ganga script the top spherule opens and the lower one becomes somewhat angularly curved, giving the contour of the neck of a goose. In the Sena letter of the 12 th century A.D. the letter is formed of a line twice curved in the shape of a swan's neek and separated from the vertical line. The Yādava and Käkatīya letter of the 13th century A.D, and the Vijayanagara letter of the 15 th century A.D. have almost a rectangular shape with the vertical stroke slightly lengthened at the lower end and having an inward curve on the left side.

The Western Cālukyan letter of the 6th century which is a rectangle standing heightwise with a dot in the belly changes into a more rounded form with the base contrally curved in in the 9 th century Rāştrakūta script. In the 11th century Western Cälukyan letter the central dot in this becomes a circlet and the top is flattened with two slight ear-like projections at either end on top. In the Hoysala script of the next century the flattened top line with projecting ends becomes a crescent placed slightly above.

The development of the letter in the Eastern Calaukyan script is almost on the same lines as in Western Calalukyan but in the 11th century A.D. the top line shoots up into two strokes 'V' shaped. In this and the Reddi script of the 14th century A.D. there is a break in the base line where it curves in slightly. In the latter and in Vijayanagar script of the 15th century A.D. the letter has a circlet instead of a dot in the centre and in the 15 th century letter a small downward stroke is added centrally at the base.

In Pallava Grantha script of the 7th century A.D. the earlier type of the letter is continued but with the letter slightly opened to the right top making the side stroke vertical and a small circlet is added to it a little above the middle. In the 8th century A.D. the circlet is lowered down. In the Cola soript of the 11th century A.D. the letter is simplified; it opens out widely and beyond the double curve of the base curls at the right terminal. The form continues in the thirteenth century Pāņdya script and in the Vijayanagara letter of the 15th century A.D. the slight curve of the base changes into a ' regular stroke giving it the appearance of the numeral 3 with a curl at the top terminal and laid on its back.

Da.-In Mauryan script it (Fig. 47) is a semi-circle with the ends continued at the top and base vertically. It is reversed in Bhattiprolu script and a top stroke is added to the right. In Kşatrapa script the Mauryan form of the letter continues though the lower vertical stroke ourves to right. But in contemporary Kuṣann and Sātavāhana scripts as also in Ikģvāku, Gupta, Kadamba, Śālankāyana, Pallava, Traikûţka, Vākāţaka, Western Ganga, Nala, Viṣpukundi, Maitraka, Somavamsi, Eastern Ganga, Western and Eastern Cālukyan scripts the sickle-shape continues with slight changes. In Gupta, Kadamba, Vākāţaka, Nala, Eastern Ganga and Somavamsi scripts the letter has a box-head and in most of theletters of the 7 th century A.D. and onwards the base line curves in slightly in the middle. In the script of Yaśodharman's inscriptions the letter has a top wedge and a short angular beak at the back. From this is derived the Nagari letter of Harṣavarddhana's time and that of the Pallava Nagari of the 7th century A.D. In the latter the curved base line suddenly slants down to right. In the 8th century Western Calakyan script the letter continues so. In the 9 th century Nagari script the wedge is replaced by a top line except in Paramãra script of the 11th century A.D. and the slanting downward stroke lengthened a bit and thereafter the letter tends to be almost like the Mauryan one reversed and with top horizontal stroke added.

The top serif of the Western Cālukyan letter of the 6th century A.D. appears more prominent in the Rāş̦trakūţa letter three centuries later and in the Western Cālukyan letter of the 11th century and later the top horizontal changes into a crescent on top of the body of the letter unconnected by the small top vertical stroke which is now lost.

In the script of the Eastern Cālukyas, Käkatīyas, Reḍḍis, and in Vijayanagara script the development of the letter may be observed as quite similar to the Western Calukyan except that the Eastern Callukyan letter of the 11th century A.D. has its serif changed into two strokes looking like ' $V$ ' above the body of the letter,


The basic form of the Pallava Grantha letter of the 7th century A.D. is not different from the earlier type except that every stroke and curve is more ornamental and the end of the vertical top stroke is forked. The lower stroke which is still small in the 8th century A.D. Pallava Grantha letter is lengthened and slants to left in the 11th century Cola script while the top stroke curves to form hook-shape. It is almost the same in the 13th century Pāndya script but in the 15th century Vijayanagara script the hook is enlarged.

Dha.-In Masuryan script it (Fig. 48) is like q strung bow with string to left or simpler still, like ' D'. The Bhaṭtiprolu letter is reversed with a stroke to top right. In Kuṣān Kṣatrapa and Sātavāhana letters it is like ' D' reversed. In the Ikṣvāku and Northern variety of Gupta script the letter is of the same type. In the Gupta letter of the Central Indian veriety it is more or less shaped like an egg with flattened and thickened top. The Kadamba letter of the 4 th-5th centuries A.D. has a flattened and thickened top and a base, curved in the middle. The Sālankāyana, Traikūtaka, Maitraka and Nala letters are eggshaped, though with top slightly flattened and thickened. The Vākātaka and Somavamsi letters have a box-head. The Western Ganga, Viṣṇukuṇ̣i, Pallava, Western and Eastern Cālukyan letters have the usual inward curve in the base. The letter of Yasodharman's inscriptions tends to be pointed towards the lower end and thereafter in all the Nagari letters it is generally shaped like the left balf of a leaf, broad or narrow. With its pointed and prolonged lower end of vertical it looks somewhat like reversed ' P ' in Päla, Rāştrakūṭa and Sena script but with the vertical projecting topward it appears somewhat like ' $\mathbf{P}$ ' reversed and upside down in Paramãra, Candella, Western Cãlukya and Gāhaḍavāla scripts. In Yãdava and Käkatīya scripts the letter looks like ' $R$ ' reversed and upside down, and the Vijayanagara letter is only a modification of the Käkatīya letter.

In Western Callukyan script of the 6th century A.D., it is the earlier type of a rectangle standing heightwise with the base line curved in the middle. The later developments of the letter with its buxom apple-shape and a crescent top show it exactly like tha with the central dot absent.

In Eastern Cālukyan script also the development is just as in tha without the dot in the centre,

The Grantha letter is similarly allied to tha without the circlet or the later curl to the left.
$N a$.-In Mauryan script it (Fig. 49) is like inverted ' $T$ '. In the contemporary script of the Tamil caves there are two types, one like the Mauryan letter and another with the vertical terminally curved to right. The Bhattiprolu letter is like the Mauryan one with the usual addition to the top stroke to the right. In the Kuṣān, Kşatrapa and Sātavāhana letters of the 2nd century A.D. the top end of the vertical is thickened and the horizontal base inclined downwards at both ends making the letter look somewhat though not exactly


like inverted ' $\mathbf{Y}$ '. In the Ikşvāku script the letter is composed of the vertical stroke forming a small loop at the base to left and curling beyond downward to right. Except in Sálankāyana, Pallava, and Viṣnukuṇḍin scripts where the letter retains the inverted ' Y' shape but in more pronounced manner than in 2nd century A.D., in all the rest like Gupta, Kadamba, Traikūțaka, Vākāţaka, Western Ganga, Nala, Maitraka, Somavamsi, Eastern Ganga and the script of Yasodharman's inscriptions the loop to the left of the base is present. In the Central Indian variety of Gupta script, Kadamba, Vākātaka, Naḷa and Somavamsi scripts the letter has a box-head. In the Nagari of the 7th century A.D. the vertical starts with wedged top and after forming a loop to left runs down, inclined to right slightly. The wedge of the 8th century Western Calpukyan letter is more pronounced and the stroke beyond the loop to right is a broader curve. Though the wedge is replaced by a top line or serif in Pratíhāra, Pāla and Rāstrakūța scripts which continues thereafter, the form of the body of the letter is the same in the first two but in the third there is a vertical stroke and from its middle to the left is a small horizontal stroke which terminally forms a loop. Except in Gujrat Cālukyan and Vijayanagara scripts of the 11 th and 15th centuries A.D. where a curve is present instead of the loop, the letter is of the same type all over. In Sena script the loop is filled and in Eastern Ganga script the line forming the loop runs parallel to the vertical to touch the serif.

In Western Catukyan script of the 6th century A.D. the vertical stroke with serif has a small curved stroke as the left limb near its base. In the Räṣtrakuṭa letter of the 9th century A.D. this curved stroke becomes more prominent, and in the 11th century Western Calukyan letter, the vertical curves inward a bit, the serif turns a crescent and with the curved left limb its assumes a shape that continues thereafter almost the same. In Eastern Cālukyan, Kākatīya, Reḍdi and Vijayanagara scripts the development of the form of the letter is similar to that in Western Calakyan except that in the 11th century A.D. the serif of the letter is forked ' $V$ ' like.

In Grantha of the 7th century A.D. the top end of the vertical is either forked or has a small serif and to the right is a curved limb. In the 8th century A.D. the vertical loops rather imperceptibly to the left base before continuing to right to form the curved limb. A hook-shaped top of the vertical, somewhat slanting down to left and continuing to right as the curved limb, constitutes the Cola Grantha letter of the 11th century A.D. Two parallel vertical strokes crowned by serif and a curved limb in continuation of the right vertical constitute $n a$ of the Pāṇdyan script of 13th century A.D. and thereafter.

In Tamil script the development of this letter is exactly as in Grantha.
In Vatteluttu the letter is like ' S ' reversed both in Pāndya script of the 8th century A.D: and in Coḷa inscriptions three centuries later.

Pa-This (Fig. 50) is composed of a vertical curyed to right at base and shaped like a hook in the Mauryan script. The letter of the Bhatyiprolu script has a top stroke to right

added. In the script of the early Tamil caves the letter is an open rectangle standing heightwise. The Kuṣān and Sātavāhāna letter of the 2nd century A.D. is an open square while in contemporary Ksatrapa letter the side stroke to left is indented half way up; and in all the three the left stroke is thickened at the top end. In Ikspāku script of the 3rd century A.D. the left stroke and the base are both curved in slightly centrally and both the vertical strokes are terminally thickened. The letter in Northern Gupta script resembles ' U' with a serif at the left top and the right vertical alightly prolonged straight downwards. The Central Indian Gupta letter is an open square and the top half of the left stroke is indented and crowned with a box-head. The letter is similar in Kadamba, Nals, Somavamsi and Eastern Ganga scripts, though in Western Ganga and Pallava scripts of the 5th century A.D. the box-head is not very distinctive. Except for the box-head which is replaced by a small erif the letter is similar in Śälankãyana, Traikūtaka, Maitraka, Viṣnukup̣inn, early Western and Eastern Cālukyan scripts. But in the Śãlankāyana, Western Ganga, Vişnukuṇdin, Pallava, Western and Eastern Callukyan letter the base line very slightly curves in at the centre. The letter of Yasodharman's inscriptions has a wedge-shaped serif to the left and the base line slants down slightly tc right ; and the Nagari letter of the 7th century A.D. is more developed, the wedge clearer, and the slant of the base line more pronounced. In the letter from Hargavardhana's inscriptions the base line curves in centrally slightly. In this and the Pallava letter of the same date the vertical stroke is slightly prolonged downwards. The letter of 8 th century Western Cālukyan script is not different. The Pratihăra letter of the 9 th century A.D. is like ' $U$ ' with serif on the arm to left and the arm to right prolonged downward vertically. The serif becomes a top horizontal stroke touching both the arms in the letter of contemporary Pāla and Rāstrakūţa scripts and in all later Nagari variations, The left arm of the letter is Eastern Ganga and Sena script of the 11th and 12th centuries A.D. slants in from the top and curves out again.

The letter in Western Cālukya and Rāstrakūta scripts of the 6th and 9th centuries A.D. is after the earlier type like Western Ganga, but a small serif crowns the indented top end of the left limb. The Western Cālukyan letter of the 11th century A.D. changes its serif into a crescent above the left arm which curves in and stops.

In Eastern Calukyan script of the 7th century A.D. it is like its western cousin ; in the 10th century a wedge-like serif crowns the right as well as the left limb and in the 11th entury: A.D. two ' $V$ ' shaped strokes replace the serif; but from the next century onwards in Käkatǐys, Reḍḍi and Vijayanagara scripts the crescent appears as in the Cansrese ares.

In the Pallava Grantha of the 7th century A.D. one variety is after the earlier type with the arm to left indented half-way towards the top and with the base line centrally surved in somewhat ; in addition the arm to left is terminally slightly forked. The other variesy is an open rectangle with the arm to left slanting inwards and thickened at its top
end. In the letter of the script of the next century the arm to the left slants inwards and a dot is added to left at its tip. The base line slants down to right a little and curves slightly. The right arm is a straight vertical. In the 11 th century Cola script the dot joins the end of the left arm to form a hook and the whole letter is like numeral 2 with the base line prolonged and raised up a little vertically.

In Tamil the letter of the 7th century has a left limb which curves and slants down to the right as the base line and mounts up vertically. In the next century it is the same type but in the llth century Cola script the letter is an open rectangle with the two corners at the base rounded. In the 13 th century Cola script and 15th century Vijayanagara soript the corners of the letter are more angular and it looks like ' E ' on its back without the middle stroke.

In Vatteluttu script $f$ the 8th century A.D. the letter starts as a hook and turns backward and up, giving the lower contour of the head, neck and body of a duck. It continues this shape in the 11th century A.D.

Pha.-In Mauryan, Bhattiprolu, Ksatrapa and ether early script the letter (Fig. 51) is the same as pa except that the lower end is curled in. In Gupta script the arm to the right curves to form a loop touching the base in the centre. This is the case of the Vākātaka letter of the 5th contury A.D. and the letter in Yakodharman's inscriptions of the 6th century A.D. In Kadamba, Śălankāyana, Pallava, Western Ganga, Vișdukuṇdin scripts of the 4th-5th centuries A.D., Maitraka and Western Cālukyan scripts of the 6th century A.D., Somavamśi and Eastern Cālukyan script of about the 7th century A.D. the right arm of the letter curves in. The Eastern Ganga and Pallava letters of the 7th century A.D. form a loop to the right.

The Nagari letter of the 7th century A.D., as seen in the inscriptions of Hargavardhana, has a loop to the right. In Päla script of the 9th century A.D. the arm to right terminally curves out but the contemporary Rāstrakûța letter has an outer loop at the top to right: In Paramāra script of the 11 th century A.D. the line forming the outer loop runs down again parallel to the vertical. In the Eastern Ganga letter of the 11th century A.D. the loop is replaced by a downward double curve starting from top to right. In the Gāhaḍavāla letter of the 12 th century A.D. the double curve starts a little above the middle to right. Fheth Sena script the letter is basically the same as its parent, though it slants and has the vertiegl extended downwards in curvilinear shape. The Käkatīya and Vijayanagara letter of the 13th and 15th century A.D. has a stroke shaped like ' S ' reversed, added to the right.

The terminal inward curve of the Western Cālukyan letter of the 8th century A.D. is replzced in the Rāstrakūta letter three centuries later by a small crescent-like downward median curve, added on the inside to the right arm. In the Hoysala letter of the 12th century A.D. the downward crescent actually cuts the tight arm towards the base.


In the Eastern Callukyan letter of the 10th century A.D. the small crescent is replaced by a semi-circlet which touches the right arm at both ends. This is developed into a regular median circle, breaking the right arm, in the letter of the 11th century A.D. The letter of the Käkatiya soript is like the Hoysala one, though in the Redḍi letter the crescent is shifted below the letter. In Vijayanagara script a stroke below the base replaces the crescent.

In Grantha script the earliest form of the letter shows a loop to the right, but later it is always the inward terminal curve of the right arm that distinguishes pha from pa.

Ba.-The Mauryan letter (Fig. 52) is a square and in Bhattiprolu script it has the addition of an outcr stroke centrally to the right. It remains a square even in the 2nd century script of the Sātavāhanas. But pronouncedly in contemporary Kęatrapa script and less so in Kuşăn script the left arm of the letter has a median inward curve. This median curve is present in the Ikşvāku letter of the 3rd century A.D. The Northern variety of Gupta scrip̂t shows the letter more or less as a square but the median curve is quite pronounced in the letter of the Southern variety. The Kadamba letter of about the same date and the Western Ganga letter of the 5th-6th centuries A.D. are not different except that the former is a little elongate heightwise. In the Pallava letter of the Prakrit charters of the 3rd-4th centuries A.D. and the Vākāţaka letter of the 5th century A.D. the left side is indented in the centre in such a manner that a small open square is formed. There is a break in the line to the left in the Sālankāyana letter of the 4th century A.D. and Visnukundin letter of the 6th century A.D., which is maintained even in the 7th century Eastern Calukyan letter. In the early Nagari letter of Harsavardhana's inscriptions there is a wedge-shaped serif and a semi-circular belly to left against the vertical stroke. It appears similarly in Western Cälukyan script of the sth century A.D., though in Pallava script of the 7th century A.D. it is shaped somewhat like ' B ' reversed without the central stroke. In almost every other variety of later Nagari the serif, semi-circular belly and the right vertical continue. The belly is divided by a stroke in the letter of the Yädava and Vijayanagara script of the 13th and 15th centuries respectively.

In Canarese script of the 6th century A.D. the letter already shows a slight median inward curvest its base in addition to the indented left side. In the 1lth century Western Cälukyan letter the top opens, the left side top curls inward out and the median curve gets more pronounced. This continues in the Hoysala letter of the next century.

In the Telugu script of the Eastern Callukyan territory the development is not very different from that in the Canarese area, except that in the 10 th century A.D. Eastern Caslukyan letter the top end of the right arm is thickened serif-like and in the 11th cenfury letter the curl to the left top is aggressive and there is a median break in the base line as in ca of the period.

In Pallava Grantha of the 7th century A.D. there are two varieties, one showing the letter with indented left side and with top and base line medially curved in alightly $f$ atd another

starting as a double curved top line from left to right slanting down to left medially curving again in the base line and rising up vertically. This second form continues more or less unchanged during the later centuries.

Bha.-In Mauryan script bha (Fig. 53) is like da with an additional vertical stroke to right, parallel to the lower one. In Bhattiprolu script this is reversed and a stroke added to top right. In Kuṣān, Kṣatrapa and Sãtarāh nns script of the 2nd century A.D. the body of the letter is double bent like a bow having a vertical stroke with thickened end on top of theright hump. The curve to the right shoots up cliff-like in the Iksvaäku letter of the 3rd century A.D. In the Gupta letter of the Northern variety a serif-crowned vertical stroke and a stroke starting from the neck and slightly slanting down to left and again down to right form the letter. In the Central Indian variety the top of the letter is crowned with a box-head, as also in the letter of the Kadamba, Väkātaka, Nạ̣a and Somavamsi scripts. Whenever the body of the letter is not curved it is a rectangle with the base open and with the vertical line to right continued up and finally thickened or crowned by a box-head. In the script of the Maitrakas the two side-strokes petal-like meet at the top. The Somavamsi letter forms two small open squares to left and at the bottom being composed of two straight strokes. The letter of Harehavardhana's inscriptions and of Pallava Nagari of the same date starts with a wedged head, curves down to left, runs down straight aslant to right slightly and curves again to right. This form of the letter is repented in Western Cälukyan script of the next century and in Paramāra script of the 11th century A.D. But in Pratīhāra, Pāla, and Rāşţrakūţa scripts of the 9th century A.D., Gujarat Callukya and Eastern Ganga scripts of the 11 th century A.D. the wedge is replaced by a horizontal serif stroke. In Candella and Gähaḍavala script the letter comprises a serif fine, a vertical stroke to right and small central stroke against the vertical branching off to form a triangle or wedge. In Western Cālukyan seript of the 11 th century A.D. and the Sena, Yädava, and Käkatīya scripts the triangle is replaced by a stroke which also lingers in the Vijayanagara script of the 15th century A.D.

In script of the Canarese area of the 6th century A.D. the curved bow-shaped body and top vertical with small serif make up the letter which continues so even three centuries later, but in the I1th century Western Callukyan letter the two limbs of the letter separate, the one to the left being like reversed ' $S$ ' and the other to the right, an inward arc, crowned by the serif changed into something like a crescent. This continues with greater flourishes in the Hoysala script of the next century.

In the Telugu area the form of the letter is composed of a slanting revereed ' $S$ ' shaped left limb and slightly arc-like right limb meeting at the top which is thickened inte a small serif. In the 11th century Eastern Cälukyan and the 12th century Käkatĩya script the letter is practically like the contemporary one in the Canarese area, except that in the former the serif is ' $V$ ' shaped. In the letter of the Reḍdi script of the 14th century A.D., the bottom

ends of the two limbs join in an ; ward c̣urve and in the Vijayanagara letter of the next century a small vertical stroke is added beneath this cenlral curve in the bottom.

In Pallava Grantha soript of the 7th century A.D., one form of the letter is like a triskelis with curved limbs and another like an angle with the end of the base line curved up and to the side to the right. In the next century the letter is so written that it slants down somewhat to right and the top is somwhat forked as usual. In the Cola script of the 11th century A.D., the forked top is just curved $\rho u t$, so that the letter looks like a flattened ' S ' slanting to right and with its top end curved up. In the 15th century Vijayanagra letter the top curve becomes a curl.

Ma.-In Mauryan script $m a$ (Fig. 54) looks like a circle with ' U ' on top. In the script of the Tamil caves it is more like ' U ' divided in the middle by a horizontal stroke. In the Kuṣān, Kṣatrapa and Sātavāhana scripts of the 2nd century A.D. it is an 'X'with a stroke at the base connecting the cross strokes. The base line is slightly double-curved in the Ikṣvāku letter of the 3rd century A.D. In the Northern variety of the Gupta script it is a square with open top, a serif crowning the left limb and base line elongated to left. In the Central Indian variety the letter has a more or less rectangular belly with the two side-strokes sutting across and forming a ' V ' shape above, the left arm being crowned with a box-head. In the Kadamba and Vākațāka letter of about the 5 th century A.D. the ' $V$ ' shaped upper part is to the extreme right, the left stroke slanting, and the right vertical in continuation of the right side stroke of the rectangle ; the box-head crowns the left stroke. Modifications of the Ikgqāku type of letter continue in the 4th-5th centuries A.D. The letter of Yasodharman's inscriptions is based on the Northern Gupta type. The base line starts slanting down to right even here and more pronouncedly in the next century and the projecting part is thickened. In the letter of Harsavardhana's inscriptions, the contemporary Pallava letter, and in that of the Western Cälukyan of the 8th century A.D., the wedge in the left limb is very clear and in the last one there is a loop in the place of the thickened projection. In 9th century Pratihāra script the wedge is replaced by serif stroke to left and the base line reverts to normal, shedding its slant and the right vertical is projected downwards. In contemporary letter of Pāla and Räştrakūta scripts there is a top horizontal stroke conneeting the two verticals. This is the usual form in all the later varieties, except in Paramära script of the 11th century A.D. where the triangular wedge to left top is present in addition, and in Sena script of the 12 th century A.D. where the lower horizontal stroke slants down again, the loop ohanges again into a thickened projection and the left side curves and sweeps up broader at the top to meet the top line.

The early letter of the Canarese area is more or less like the letter of the earlies Salankāyana or Pallava script. The 9th century Rāşrakūta letter showethe two arms of the lotter shifted to right in such away that the right arm actually cranes out and rises up and the left limb is crowned by a small serif. In the 11th century Western Calukyan acript the

apple-shaped belly of the letter slightly opens, separating itself from the vertical, the top end serif of which is transformed into a crescent and the limb curving upward to the extreme right is present. This form of the letter is continued in the Hoysala script of the next century.

Even in the 7th century Eastern Calukyan script the right limb of the letter cranes out and the serif is present on top of left limb; in the 10th century A.D. the letter becomes graceful and the top end of the right limb has also small thickened wedge. In the next century the serif of the left limb changes into a ' $V$ ' shape and from the following century onwards the letter in the Telugu area is as that of the Canarese.

One of the varieties of the letter in Pallava Grantha of the 7th century A.D. shows it somewhat like the Western Ganga letter of a century earlier, while another is the simpler' X' with a base line joining the arms. In the next century the second variety is shown with a base line double curved. In the 11th century Cola script and later the letter resembles the numeral 8 with the lower part larger and somewhat flattened. In the Vijayanagara script the letter is a circle crowned by a dextral curl.

In Tamil of the 7th century A.D. the letter is a crescent with the right tip curved in. In the next century the right side of the letter has flattened loop. In the 11th century Cola letter the earlier form is repeated but with the base flattened and with the curve to right more approaching a curl. In the 13th oentury Cola soript the letter develops a full loop to the right which continues thereafter.

In Vatteluttu script of the 8th century A.D. the letter has the contour of a goose with a loop at the tail end, and the form continues almost the same in the 11th century A.D.
$\mathbf{Y a}$. $-\mathbf{Y a}$ (Fig. 55) in the Mauryan script is a crescent with a long vertical rising from its central point. In the Bhattiprolu seript it has a top stroke to right in addition. In the script of the Tamil caves three prongs of equal length make the letter. In the Sãtavãhana script of the 2nd century A.D. the central stroke is shortened and its"tip thickened. In contemporary Kuşān and Ksatrapa script the central stroke of the letter is similar, the left limb amply spreads into a curve and the right one shoots up vertically, the curved base of the letter getting flattened and the letter itself tripartite. The Ikşvàku letter is more or less after the Sātavāhana type but the Northern Gupta letter is after the Küsan type, the Central Indian variety being a little compressed and having the central box-head in the place of the serif wedge. The box-head appears in the letter of Kadamba, Nala and Vākātakd scripts of about the 5th century A.D. and in the compressed Somavam ${ }^{\circ}$ i letter of the 6 th-7th oenturies A.D. The base line between the middle and left limb of the letter of Visnnukundin and Western Calukyan scripts of the 6th century A.D. and of the Eastern Calukyan letter of the next century curves in medially and a small serif is present on top of the central stroke of the Traikūţaka, Maitraka, Śalankāyana, Western Ganga, Viṣpukunḍin, Western and Eastern Calukyan letters. The Western Ganga letter presents also a loop to

left. In the letter of Yasodharman's inscriptions the left loop is present and the cepntrak stroke has a forked tip. In the Nagari letter of Hargavardhana's inscriptions and the Pallava Nagari letter of the time the central stroke separates itself from the base and joins the opened up loop and the base line slants down to touch the vertical, the letter thus being bipartite with a wedge on top of the vertical, to left. In Western Cälukyan script of the 8th century A.D. it is the same type of letter that is present. In the Pratihāra script of the next century the wedge is replaced by a serif stroke. But in the contemporary Päla and Rasstrakūta letter the serif stroke closes the top entirely and this continues in all the later forms. In the Candella letter of the 12th century A.D. the original base line of the letter ourves in to touch the vertical.

The Western Callukyan letter of the 6th century A.D. becomes a flattened buxom letter in Räşrakuta script of the 9 th century A.D. and the left limb almost forms a circle touching the inward curve of the base line already formed; and this circle is perfect in the 11th century Cālukyan letter which has its serif changed into crescent shape. This form continues in the Hoysala letter of the 12th century A.D.

The development of the letter in Eastern Calalukyan area is not so different, the difference being noticeable in the 10th and 11th century inscriptions. In the former the circle to left rises up slightly and the right limb so separates itself that it appears a separate small hook starting from the right end of the small serif. In the latter the serif changes into ' $V$ ' shape and right limb shoots up vertically rather abnormally. In the 12th century Käkatiya script and thereafter, the development is not different from that of the Canarese area.

In the Grantha of the 7th century A.D., of the two types, one shows the letter with a loopto left and with central and right verticals undulating artistically, the central stroke having forked tip, and the other variety is simpler. The simple variety is continued in the next century with the loop itself curved somewhat. This form is further simplified in the Cola letter of the 11 th century A.D. In the 13 th century Pāndya script and later the letter is a rectangle with open top and a slanting stroke dividing the angle to left.

In the Tamil script except for the absence of the ornamental type of the 7th century A.D, the letter is exactly like its Grantha prototype.

In Pändyan Vatteluttu of the 8th century the letter starts as vertical, curves bulgingly upward to left and curves in towards the top. In the 11th century Cola letter the curve to left suddenly stops and curves up again almost parallel to the outer curve.

Ra.-The Mauryan letter (Fig. 56) is a wavy vertical. In the Tamil caves the letter is: a simple vertical stroke and in the Bhattiprolu script it is the vertical with the usual stroke to top right. In Kuşan, Kşatrapa and Sātavãhana script this vertical stroke has thickened top end and the lower end curves slightly to left. In Tksväku script of the 3rd century A.D. the curve of the lower end almost develops into a curl. In the Northern variety of the Gupta script the letter is a vertical stroke with small serif. In its Central Indian variety this is


Fig. 56
O.S. del.
replaced by a box-head in which the vertical bends at the lower end to shoot up again parallel half-way. In the Kadamba, Vākātaka, Western Ganga, Nala and Pallava inscriptions of sbout the 5th century A.D. and in Somavamsi and Eastern Gange scripts of about the 7th century A.D. the box-head, as also the parallel continuation of the lower end of the vertical are present. In the Śalankāyana letter of the 4th century A.D., Traikūtaka letter of the 5th century A.D., and the Maitraka, Western Cälukyan and Vigpukunḍin letter of the 6th century A.D., the small serif is present instead of a box-head. In the letter of Yasodharman's inscriptions a wedge crowns the top of the vertical, the lower end of which is triangularly thickened. In the script of Harsavardhanä's inscriptions and the Pallava Nagari of the same date, the letter has a wedge on top and at the lower end it slightly shoots up from a point giving the shape of half an arrow. This continues in the 8th century Western Călukyan script. In the 9th century Pratihāra and Pāla scripts the wedge is replaced by a serif; the vertical stroke slightly curves to right towards its lower end and shoots up again to left half way to form a compressed curved triangle ; a similar feature is found also in the letter of Paramāra, Candella and Gāhadavāla scripts of the 11th-12th centuries; the vertical being straight, the triangle is also similarly formed in the Western Calukyan letter of the 11th century A.D. and the Sena letter of the 12th century A.D., in the latter case the triangle being filled in. In the Räştrakuṭa and Eastern Ganga letter of the 9th and 11th centuries A.D. respectively the curved triangle is an open one, as the stroke running half way up vertically to left is absent. In Gujrat Cālukya and Yãdava letter the triangle is an open one, as it lacks the lower half of the vertical, forming its right side. In the Käkatīya letter the triangle is again open, as the small central horizontal stroke joining the left slanting stroke is absent, making the letter look like half an arrow head. In the Vijayanagara letter of the 15th. century A.D. a slanting stroke to left is absent and the triangle is again open.

In the Canarese area the 6th century Western Callukyan letter is composed of a vertical stroke crowned by a small serif stroke, its lower end being bent and running parallel half way up. In the Rāştrakūta script of the 9th century A.D. this parallel stroke proceeds right up to meet the serif that extends to meet it. In the Western Calukyan letter of the 11 th century A.D. and thereafter the serif becomes crescent-shaped and separated from the body which becomes circular.

The development is not very different in the Telugu area, except that in the 10th century A.D. Eastern Calukyan script the letter is an oval with serif on top, which in the 11 th century A.D. becomes an oval with ' $V$ ' shaped serif on top. In the 12 th century Käkatīya script and later the serif is crescent-shaped.

In Grantha of the 7th century A.D, the letter is shaped like a test tube, being composed of two long parallel lines joined at the top and the bottom. The top becomes open in the letter of the next century. It is again joined in the rather short Cola letter of the 11the
century A.D. In the Pandya letter of the 13th century A.D. the top and the bottom line extend slightly to left and in the 15th century Vijayanagara letter the top stroke not only extends but also climbs down slightly.

In Tamil all these developments are present but there is only one vertical stroke.
In the Vatteluttu script of the 8th century A.D. the letter is a vertical that starts with a hook to left top and slightly slants to right and continues so in the 11th century Cola script.

La. - In Mauryan script it (Fig. 57) is like an upturned, left-facing beaked hook. The curvilinear base is flattened in the letter of the Tamil caves. In Bhattiprolu script the letter is like reversed ' $N$ ' with stroke to right top. The Kuṣăn letter of the 2nd century A.D. has a flattend base and is angular, not curved. In the contemporary Ksatrapa and Sātavāhana letter the beak curves, the base is flat and the right vertical stroke either curves in or out slightly. In the Ikssāku letter which is almost similar the base medially curves in and the long right vertical is straight, curving in only at the top end. In the Northern veriety of Guptascript a vertical with serif on top forms a deep curve to the left from its base; the Central Indicu variety is more or less like the Iksavaku letter, but with the line of curve of the vertical deeper and its end almost reaching the curved beak. The form of the letter in almost all the scripts from the 4th to the 6th century A.D., like Kadamba, 3rd to 4th century Pallava, Vākāţaka, Western Ganga, Nala, Viṣṇukuṇ̣̣i and Western Cälukya is almost the same, except in Śālankāyana, Maitraka, Eastern Cālukyan, Eastern Ganga and Somavamsi scripts of the 6th-7th centuries A.D. where the top curve encircles the letter all around except the base. In the Somavamsi and in one ornamental variety of Pallava Grantha of about the 7th century A.D. the curved stroke proceeds angularly and produces the effect of an open rectangle. The Traikuțaka letter of the 5th century A.D. and the letter of Yasodharman's inscriptions of a century later have just a small vertical stroke to the right which does neither shoot up and curve or encircle the body of the letter. There is also a wedge present at the top end of the stroke in the letter of Yasodharman's inscriptions. In the Nagari letter of the 7th centary of the inscriptions of Harsavardhana and the Pallavas, the wedge is more defined and the base line slants up to left before curving, and the vertical is somewhat lengthened rownward. The Western Calukyan letter of the sth century A.D. is almost like the other two, and even in the 11th century Paramāra letter the wedge is present. In the Pratīhära, Pāla and Rāṣtrakūța letters of the 9th centuryA.D.the curved beak of the letter is lengthened downwards somewhat to right. From the 11th century onwards the small base line also curves and thus a double curve is found to the left of the vertical. In the Sena script of the 12th century the double curve is absent and the central horizontal stroke parallel to its serif ourves to left. The Yãdava and Kükatíya letter of the 13 th century A.D. and the Vijayanagara letter of two centuries later are shorter and broader.

In the Canarese area the early Western Cälukyan letter of the 6th century A.D. deveiops into a buxom thíng in the Rāṣtrakūṭa script three centuries later, which starts as a hook

running into a slightly double bent base line that curls up to the left, encircling the body on all sides. In the Western Cālukyan and Hoysala. letter of the 11th and 12th century A.D. respectively, the body of the letter dwindles and the whole thing is an encircling curl.

In the Telugu area the beaked hook of the 7th century Eastern Callukyan letter curls and encircles the body up to the base, as in the earlier forms. But in the 10th century A.Di, the letter is more or less like its Western Cālukyan cousin of a century later, though it has specially in addition a small serif at the end of the curl that shoots up vertically. The further development of the letter is as in the Canarese area.

In Pallava Grantha of the 7th century A.D. one type of letter is composed of a small vertical slanting to left with forked top, curving to left and forming a belly, the base of which is slightly arched and the line continues at first vertically, then horizontally and vertically again surrounding the body of the letter by something like an open rectangle ; the other is a small double curve continued on top to half encircle it. The latter type is found in the 8th century A.D. with the small double curve almost straightened and continuation of the line encircling it, flattened at the base, and drawn vertically to fully surround the body. In the 11th century letter, which is very similar to this, the straightened double curve diminishes further ; but in the 13th century A.D. the double curve reappears with marked distinctiveness and the base line as well as its vertical terminal are quite straight and this continues even in the Vijayanagara period.

In Tamil of the 7th century A.D. it is like reversed ' $S$ ', with bottom end somewhat curled with top slightly flattened and laid on its back. This form is more or less repeated in all later development.

In Vațteluttu the letter is not different from that of Tamil.
Va.-The letter (Fig. 58) of the Maurya script and of the early Tamil caves is a circle with a vertical, placed centrally right on its top. The Bhattiprolu letter is pear-shaped with top stroke to left. The Kuşan letter is an quilateral triangle with the top crowned by a small wedge. The equilateral triangle in the Sãtavāhana letter and the pear-shaped body in the Kṣatrapa lettèr are ciowned ly a vciy sn all scrif vertically. The Ikṣvâku letter, which is similar to the earlier Sātavāhana, has a s1 + 11 inward curve in the centre of the base. The Northern variety of Gupta letter is Kase co nh he Kusãn type ; but the Central Indian type is a rectangle with right side continued up and crowned with a box-head. The letter in the Kadamba-Väkāţaka scripts of the 4th-5th centuries A.D. and the Somavamsi script of the 6th-7th centuries A.D. is similar to the Central Indian Gupta variety, except that the last is compressed and elongated. The Nala and Pallava letter of the 5th century and Eastern Ganga of the 7th century A.D. have also a box-head but the belly of the letter has the contour of a fig. The letter of Sálankāyana and Pallava Prakrit charters is more or less after the Ikgvãku lętter. 'The belly of the letta* in Western Ganga and Pallava (5th century A.D.);


ETG. 5 S.
C.S. del.

Viṣnukuṇ̣̣in and Western Cälukyan of the 6th century, A.D., and in Eastern Ganga and Eastern Cālukyan of the next century, has a median inward curve at the base line. The Traikūtaka and Maitraka letter is more or less triangular, with top angle slightly ehipped to take a thick serif. Yasodharman's inscriptions reveal a similar letter.

The Nagari letter of the 7th century, A.D., as seen in Harsavardhana's inscriptions, is more or less like the contemporary letter $b a$. The Pallava letter of the time is however not like the $b a$ of the same script but almost like the contemporary Vardhana $b a$. The wedge crowns the letter. All the later developments of this letter in Nagari are like those of corresponding $b a$, except in Yādava and Vijayanagara letter of the 13th and 15th century A.D., respectively, where the stroke in the belly of the letter $b a$ is absent in $v a$.

In Canarese area, the early Western Calakya letter of the 6th century A.D, is after the Western Ganga type. The letter is almost of the same type in the Rästrakūṭa script three centuries later but in the 11th century Western Cälukyan letter, the belly of the letter slightly opens, the tip of the line forming the belly not touching the vertical which curves just a little to left, its top being crowned with the serif changed into crescent shape. The letter continues so in the 12th century Hoysala script.

The development of the letter in the Telugu area is not different from that in the Canarcse area except in the Eastern Calukyan letter of the 11th century A.D., which has a ' $V$ ' shaped serif.

Of two varieties of the letter in Pallava Grantha script of the 7th century, A.D.. one is almost like the Western Cälukyan letter of the previous century, except that the serif of the Pallava letter is forked. The second variety is pear-shaped with a thick small serif, In the Pallava letter of the next century, the pear-shaped letter becomes more buxom and develops a median inward curve on the base, the serif being split into two tiny spokes. In the 11th century A.D., the base line straightens and the letter completely opens and it looks like contemporary $u$ with the tail-end elongated vertically somewhat. This form continues during the later centuries.

In Tamil, the development of the letter is not different from that in Grantha.
In Vatteluttu, the base line of the Tamil letters curves out a bit, making the letter take the outer contours of a goose.

Śa.-This (Fig. 59) is shaped like an arrow mark in Mauryan script. The Bhattiprolu letter has a top stroke to the left in addition. The Kusān letter of the 2 nd century A.D. is horse shoe-shaped with a line across in the middle. The contemporary Kşatrapa and Sätavāhana letter is horse-shoe shaped with a small medial curvilinear vertical stroke. The Súlankāyana letter of the 4th century A.D., is a horse-shoe with a stroke across its belly. The contemporary Pallava letter of the Prakrit charters has a small base stroke added to the left

arm of the horse-shoe and the right arm is lengthened straight down somewhat. In the Gupta script of the northern variety this is repeated. In the Central Indian variety it is the horse-shoe with stroke across the belly and the box-head on top. The Kadamba, Vākātaka, Nala, Western Ganga and Pallava letters of about the 5th century A.D., the compressed elongate Somavamsi letter of the 6th-7th century A.D., and the Eastern Ganga letter of the 7th century A.D., have the box-head top and resemble the Central Indian Gupta variety, except the Pallava which has no stroke across its belly but just a small curl added centrally to the right arm on the inside. The Traikūṭaka, Viṣnukuṇ̣in, Maitraka, Western Cälukyan letters of the 5th-6th centuries and Eastern Callukyan letter of the 7th century A.D., are similar but lack only the box-head; but the left arm of the Viṣnukundin and the Western Cälukyan letter curves in terminally. The letter of Yaśodharman's inscriptions is after the letter of the Northern variety of the Gupta script. In all these varieties of script till the 9 th-10th centuries A.D., this letter is practically the same as $g a$ with either a central stroke across or a curl to right. The Nagari letter of the 7th-8th century A.D., is just $g a$ with a stroke across the belly. The letter of Harsavardhana's inscriptions, the Pallava letter of the 7th century A.D., the Western Callukyan letter of the 8th century A.D., the Rāṣtrakūṭa letter of the 9 th century A.D., are thus similar to $g a$ with a stroke in addition. The Pratihära and Päla letter of the 9th century A.D., show some difference; there is no top horizontal and the left arm curves in at the top in the case of the former and the left arm joins the right vertical centrally after curving in somewhat in the case of the latter. The Gujrat Cajlukya letter has again no top horizontal, the vertical stroke alone having a small serif, and the left limb curves to left and slants down to right. The Paramära Ietter is more or less like the Pratihāra one, except that the top curve of the left limb comes closer to the vertical and the curved triangular lower terminal of the same is larger. In the Candella letter the left limb has both a top curl to left and a leaf-like lower terminal different from that of the left limb of $g a$ of the same script. The Western Callukyan $\delta a$ of the 11 th century A.D., is curved to left top and slants down somewhat, as in the Gujrat Cąlukya letter but there is the top horizontal stroke. There is a double bump on top for Eastern Ganga śa instead of a single one as in ga. The Găhaḍavala letter is more or less like the Western Călukyan of the 11th century A.D. The Sena letter of the 12 th century A.D. has a double bump instead of a single bump as in ga. The Yādava and Kākatiya letter of the 13th century and the still later Vijayanagara letter are modifications of the Western Callukyan letter of the 11th century A.D.

The Western Cālukyan letter of the 6th century A.D., already described changes into a buxom horse-shoe with a stroke across the belly in the Rägtrakutta script of the 9 th century A.D. In the 11 th century the Western. Callukyan letter begins almost as a small top curl curving to right and forming a large loop below ; above the top curl is a crescent shaped serif. The Hoysala letter a century later is similar.

In the Telugu area the early Eistern Cālukyan letter of the 7th century A.D., which is a. horse-shoe with stroke across the belly, becomes a buxom letter in the 10th century exactly like the Rãştrakũța one of the century earlier but with the addition of a wedge-shaped serif above it. In the Eastern Cälukyan script of the 11th century A.D., the serif becomes 'V ' shaped and in the Käkatīya script of the 12th century A.D., and thereafter the latter is like the one in contemporary Canarese area.

In Pallava Grantha of the 7th century A.D., one type is shaped like a horse-shoe with small wedge-shaped serif on top or similar still, like contemporary $g a$ and has a small curl on the inside to the right instead of the central stroke across. Another is just like contemporary $g a$ with the right terminal curved in almost to form a loop. The letter of the next century has similar characteristics ; the Cola letter of the 11 th century A.D., and subsequent development of it show the letter almost like ga with the right terminal curved in.
$\$$ Sa.-The Mauryan letter (Fig. 60) is a hook with a central curved upward stroke. The Bhațtiprolu letter is a hook with a very small central and top stroke to left. The letter in Kusain script of the 2nd century A.D., is a square with top open and with a central stroke across. The contemporary Ksatrapa and Sātavāhana letter has a small stroke across to the left of similar open square. The Gupta letter of the Northern variety is a narrow oval with serif on top and with a stroke running down slanting to right from it and shooting up vertically. The Central Indian variety is like contemporary $p a$ with stroke across belly. In all the early forms of the letter, as in Kadamba, Sallankāyana of about the 4th century A.D., in Vākāțaka, Western Ganga, Nala, Viṣnukuṇdin, Maitraka, and Western Cālukyan of about the 5th-6th centuries A.D., and in Eastern Ganga, Somavaméi and Eastern Cālukyan of the 6th-7th centuries A.D., the letter corresponds to the pa of the series with the addition of a central stroke across. The letter of Yasodharman's inscriptions is not different, though in the Traikūtaka and Maitraka letter the stroke on the belly slants down slightly. In the Nagari letter of Harsavardhana's time and in the Pallava inscriptions, the central stroke slants down slightly. Similarly it slants slightly in the 8th century Western Cälukyan 9th century Pratiharā and Pāla letter, and more prominently in 11th century Paramära Candella, Western Călukyan and Ganga, 12th century Gāhadavãla and 13th century Yãdava and Kākatiya letter. The stroke is quite horizontal in the Rāstrakūṭa letter of the 9th century A.D., 11th century Gujrat Cälukya letter and 12 th century Sena letter. In tho 15th century Vijayanagara letter the stroke is more vertical than slanting. In all these the addition of the stroke, whether slanting or horizontal distinguishes the letter from pa.

In the Canarese area the stroke across distinguishes the letter in the early Western Cülukyan script of the 6th century A.D., and in the Rāstrakūta script three centuries later. In the Western Cälukyan letter of the 11th century A.D., and thereafter, the horizontal stroke is present, as it actually joins the curve composing the belly to the right vertical.


In the Telugu area the development of the letter is as in the Canarese area except that in the 11th century Eastern Cālukyan script it has a 'V' shaped serif. In the 14th century Reḍdi script and later the central horizontal stroke has a break in the centre, though its terminal cuts the vertical and extends slightly beyond it.

In Pallava Grantha script of the 7th century A.D., the letter is just like $p a$ of the same time with a small curve added on the inside to the right in one variety and the right terminal looped in another. In the 8th century the inward curve to the right continues. In the 11th centruy Cola script and thereafter the right end of the letter slants in upwards, forms a loop, and runs down again slightly to left first almost touching the base line and later cutting it.

Sa.-In Mauryan script the letter (Fig. 61) is more or less like a triskelis, except that the top limb is straight and not curved like the other two. In the Bhattiprolu seript there is a stroke added to the top right of the letter. In the Kuṣān, Kṣatrapa and Sätavāhana script of the 2nd century A.D. the letter becomes more buxom, the vertical stroke is shorter and has a small wedge-like serif at its top, the curved limb to left slants down slightly to right and the right curved limb shoots up to very nearly the wedge of the vertical. The Ikspaäku letter is somewhat compressed. The Northern variety of Gupta letter is composed of a stroke that starts with the wedged serif, forms a loop to left, slants slightly to right and shoots up vertically. The Central Indian variety shows the letter with a box-head replacing the serif. The Kadamba, Väkātaka, Nala, Western Ganga and Pallava letter of the 5th century A.D., and the Somavamśi and the Eastern Ganga letter of about the 6th-7th centuries A.D. have the box-head. The rest of the earlier types, like Śalankāyana and Pallava of about the 4th century A.D., the Traikūtaka, Viṣnukuṇdin, Maitraka and Weetern Cālukyan of the 5th-6th centuries A.D. have the small serif. The letter in Yasodharman's inscriptions is more or less like the Northern form of Gupta letter with a filled-in triangle instead of the loop to the left. From this is derived the Nagari letter of Hargavardhana's inscriptions, with a pronounced wedge and triangle to left, slanting horizontal stroke and right vertical, slightly elongate towards the lower end. The contemporary Pallava Nagari letter has the triangular part opened up and this continues in the Western Cälukyan letter of the 8th Century A.D., where the slanting line connecting the right and left limbs curves in. The wedge to left in these letters is replaced by a small serif in the Pratihära letter of the 9th century A.D. In the Pāla, Rāştrakūţa, Gujarat Cālukya, Paramāra, Candella, Eastern Ganga and Gähadavāla letter the small serif is replaced by one that extends to meet the top end of the right limb of the letter and the triangular part to left is open. The Paramāra letter shows the wedge or triangular head at the top end of the left limb in addition to the horizontal serif stroke. The Sena letter shows the triangular part not open as in the rest but compressed and diminutive. In Western Călukyan letter of the 11th century A.D., the Yädava and Käkatiya letter of the 13th century A.D. and the Vijayanagara letter of the 15th century A.D. the curve connecting the left and right limbs is replaced by a horizontal right across in the centre of the letter.


In the Canarese area the form of the Western Callukyan letter of the 7th century A.D. in continued in almost the same manner even three centuries later but in Western Cālukyan script of the 11th century A.D. the vertical drops out and the serif changes into a crescent immediately above where the small curved left limb curves down again and shoots up slantingly to right as the right limb. This form continues in the Hoysala letter of the next century.

The development of the letter in the Telugu area is not very different from that in the Canarese area except that the Eastern Calakyan letter of the 10 th century A.D. has a small wedge-shaped serif and the letter of the next century a ' $V$ ' shaped one.

In the Pallava Grantha letter of the 7th century, there is one type showing the earlier in a more ornamented manner and with the top of the vertical forked and thickened; .the other composed of a stroke slanting down to left and again to right and curving to slant down again to right and rise vertically. The Pallav aletter of the next century shows the same type, with its angle formed by straight lines and with a rectangle formed immediately below the serif to left. In the 11th century Cola script, the letter sheds its angularity, starts as reversed ' $S$ ' to left, curves up and down, and ends as a vertical to right. In the 13 th century Pāndya script the reversed ' $S$ ' shaped part develops a curl at the top, flattens at the base and continues almost as in the earlier Cola letter. The Vijayanagara letter of the 15th century A.D., is not different from this.

Ha.-In Mauryan script ha (Fig. 62) is just like la reversed ; in Bhattiprolu script a top left stroke is added as usual. In the 2nd century script of the Kuṣăpa, Kşatrapa and Sātavähana the vertical stroke is shorter and thickened at the top end and slightly curved in, the bottom widened, flat and angular and the beak curved. The Ikgvāku letter is very much after the Sätavāhana letter though a little more compressed. The Northern variety of Gupta letter is like an inverted question mark without dot and with a small serif added instead. The Southern variety shows the letter with top half of the left vertical stroke indented, as in $p a$, and crowned with a box-head. The curve of the beak is rather raised and deep, as the terminal is prolonged downwards. The box-head occurs in the Kadamba, Väkätāka, Nala, Somavamśi and the Eastern Ganga scripts as usual. In all these scripts of the 4th, 5th and 6th century the letter is more or less like its contemporary $p a$ with the right vertical slightly shorter and curved down and the terminal prolonged downwards hook-like. The letter in Yasodharman's script is almost like the rest of its date, except, that the left vertical is not indented. In the Nagari letter of the 7th, 8th and 9th centuries A.D., the letter is more or less like $l a$, with the angularity at the bottom emphasised by a small stroke in continuation. This becomes a feature in all the later varieties of the letter.

The letter in the Canarese area, both in the 6th century Weatern Callukya and 9th century Rāştrakūta, script is more or less like the earlier form. In the 11 th century Western Calakya, 12th century Hoysala and later scripts, the curve to the right becomes more prominent at first and later tends to curl.


This tendency in the development of the letter is to be observed in the Telugu territory also. And except for the usual ' $V$ ' shaped serif of the 11th century Eastern Cälukyan letter, there is no great difference between the letter of the contemporary Canarese and Telugu areas.

In Pallava Grantha of the 7th century the ornamental letter shows a forked terminal for the indented left vertical a double curve at the base and the beak curves half way round the bottom. The second variety is simpler. The ornamental variety is developed in the 8th century as a somewhat simple one. In the 11th century Cola script the letter starts like contemporary ' $u$ ' with a hook and straight base line and slightly rises up to curve and slant down to left. This form of the letter continues in the 13th century Pāndya and later still in Vijayanagara script.

La.-This letter (Fig. 63) occurs as already observed in Canarese, Telugu and Tamil areas. In the Telugu and Canarese areas it is more or less a circle dividing itself into two and curling its ends both sides topwards with an inward dent at the base.

The earliest Tamil form of the letter as observed in the cave inscriptions of the 3rd century B.C. is not materially different from the latest one and the letter has been practically the same all through the centuries. The Vatteluttu letter is also similar to the Tamil one.

La.-This letter (Fig. 64) is quite common in inscriptions of South India and the Deccan. It is closely related to the regular dental $l a$; and this association is clearly preserved in the form of the letter even in Tamil cave inscriptions of the 3rd century B.C., where it resembles the letter $l a$ with just a vertical stroke, with its top slightly curved to join it, added to the right. The same scheme of the letter continues even later in Tamil inscriptions right from the 7th century A.D. where the later form of the Tamil letter $l a$ has a vertical stroke added to right. It is not different in Vatteluttu but as usual in this script the latter slants somewhat.

The letter of the Bhattiprolu script is a vertical curved at the base to right and having two small horizontal strokes to right at the top and in the middle. In Sãtavāhana script of the 2nd century A.D., it is developed from the earlier form represented at Bhattiprolu, the vertical bulging out in curvilinear shape to left and the middle stroke and basal curve transforming themselves conjointly into a fork shape. It is noteworthy that it occurs in the same shape in Kusãn and Kşatrapa inscriptions and even in Gupta script. This characteristic form of the letter continues more or less the same in Gupta (4th century A.D.), Viṣṇukuṇ̣in (6th century A.D.), Western Cālukya (6th century A.D.), and Rāş̣trakūṭa (9th century A.D.).

The later Telugu letter is only a further transformation of thif letter as observed in Vig̣ukundin alphabet (6th century A,D.). The Grantha letter of the Pallava inscriptions of the 7th and 8th centuries A,D., is only a modification of this variety though the fork is


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11. 64
ehanged into a broad curve drawn with a flourish. From the Cola period onwards the letter tends to take somewhat after the Tamil form. It resembles more or less a siokle in shape.

Ra.-This and the preceding two letters are peculiar to Canarese, Telugu and Tamil areas. This letter (Fig. 65) occurs so early as the 3rd century B.C., in the inseriptions of the Tamil caves where it is somewhat like a reversed and diagonally drawn $Z$ with the addition of a lower stroke, a form which without the additional stroke is continued in Pallava Tamil script of the 7th and 8th century A.D. From this develops the sickle-shaped late letter of the Cola and Vijayanagar periods. The Vatteluttu letter is after the Tamil one.

The basic form of this letter in the Canarese and Telugu areas is two circles, olosely linked with a horizontal line running across them. In the initial stages it can be observed that it looks only like one circle separating into two at the bottom the separation being more complete at the top rather than at the bottom at a later stage. The name bakafarepha applied to this letter in Telugu is in complete accord with the formation of the letter with the two wheel-shaped circles and an axle shaped cross stroke.


FIG. 65.

## SELECT PASSAGES FROM INSCRIPTIONS.

The earliest Brāhmi records yet discovered in India, as already pointed out, are the Piprahwa vase inscriptions and the writing on the Eran coin. But from the third century B.C. the inscriptions of Asoka form the most important records in that early script distribated all over the land. There are, as previously stated, local variations in the script used for the edicts of Asoka incised on rocks and pillars. The passage given below (Fig. bu) is a small selection from one of the Mysore edicts of Asoka or, more specifically, the Brahma-giri inscription in the vicinity of Siddāpura (Hultzsch C. Inscr. Ind. I p. xxvii and pp, 177-178) discovered by B. L. Rice during his explorations in Mysore. It is in the southern variety of the Asoka script which is most pronounced at Siddāpura ${ }^{1}$ and Girnar (Ind. Ant. XXXIII, p. 34). Regarding the similarity between South Indian epigraphical documents and those from Gujarat or Kathiawād, Bühler has drawn pointed attention to the grants of the Traikūtakas, Gurjjaras and the rulers of Valabhī where the letters are of the Southern type (Eli* graph. Ind. III, p. 135). These inscriptions from Siddāpura were written by a scribe called Capada who must have served in Northern India, as the last letters of these are in the Northern Kharosthii alphabet to which he was accustomed. The use of ra here, instead of la, in places where ancient Mãgadhi would require $l a$, is one of the important points to be noted, as this is peculiar to the Southern variety of Präkrpt,

FIG. 66.
C.S. del. से हेवं देवानं पिये
आह मातापितिसु सुस सितविये हेमेव गरुतं प्राणेसु द्रह्यितव्यं सचं वतवियं से इमे धमगुणा पवतितविया हेमेव अंतेवासिना आचरिये अपचायितविये उतिकेसु च कं यथारहं पवतितविये

[^1]
## एसा पोराणा पकिती दिघावुसे च एस हेवं एस कटिविये चपडेन लिखते लिपिकरेण ${ }^{1}$

The sonthern variety of Asoka's script is only a variation of the usual type of letters found all over the land. But at Bhattiprolu, a village in the Krishna district, where A. Rea discovered inscriptions on stone caskets and a crystal piece from a stupa, the script is of a special variety (Epigraph. Ind. II, p. 323). Some of the letters here are, as already pointed out, quite peculiar and differ substantially from letters of the Aśoka variety denoting the same values. The five abnormal letters $g h a, j a, m a, l a, s a$; the letter $l a$, altogether new to Asokan Brahmi, but which continues in later Southern inscriptions like those of the Sãtavāhanas and their successors in the Deccan, the abnormal horizontal stroke whose presence connotes lengthening of a consonant is the regular Asokan variety-are among the most noteworthy points of the Bhattiprolu script. The inscription given here (Fig. 67) is from the third casket. The lines in the centre are from the lid and the line running all around is from the edge of the lower or the box-portion of the casket.

C.S. del.

[^2]On the lid-
नेगमा
वछो चघो
जतो जभो तिसो
रेतो अचिनो षभिको
अखधो केलो केसो माहो
सेटा छदिको ओखबूलो
सोणुतरो समणो
समणदाषो सामको
कामुको चीतको ${ }^{1}$
On the rim of the casket.

## अरहदिनानं गोठिया मजूस च षमुगो च तेन कम येन कुबिरको राजा अकि ${ }^{2}$

The Brāhmi script clearly suggests its great antiquity in South India by the separate form of some letters in inscriptions found in caverns in South India, specially in the Pānḍan country. Bühler felt that the southern variety of Brahmi, represented by the Bhattio prolu inscriptions, should have had many varieties in the 3rd century B.C., an existence independent of the Asoka edicts, and a long history of growth. This is supported by the letters in the puzzling inscriptions of the Pāndyan country. Cammiade's discovery of a cavern with Brähmi inscriptions at Marugalalai, in Tirunelveli district, was followed by the discovery of many others. V. Venkayya, who examined the newly discovered ones, felt they were Buddhist caverns, the inscriptions being the earliest lithic records in the Tamil country and important for throwing valuable light on the origin and development of Tamil and Vatteluttu alphabets. Such caves with inscriptions were found in Alagarmalai, Ānaimalai, Aracallur. Āykuḍi, Kalugumalai, Karungalakkudi, Kiḍaripațti, Kilavalavu, Kongãpulayankulam, Kunnakkudi, Māmandur, Mankalam, Margalvalai, Metţupatţi, Muttuppattii, Pugalur, Sittannavãsal, Tiruchirāppalli, Tiruparankunram, Vāvicaiyur and Vikkiramangalam. H. Krishna Sastri tried his best to decipher many of them and published their impressions to enable decipherment. But their language has always been a puzzle. One of the discoverers of these caverns, K . V. Subrahmanya Aiyar, has given an explanation of these letters which is very interesting and plausible. ${ }^{8}$ According to him, the inscriptions are Buddhist and in

[^3]the Tamil language．He has specially noted five letters of this alphabet，not known to the Asokan inscriptions and explained them as i，$n a, l a$ ，la，and $r$ all of them special to Tamil and Vatfel！uttu．Jouveau Dubreuil discovered at Arikameḍu，near Pondicherry，potsherds with inscriptions in letters similar to these，which await interpretation；and this extends the area of these inscriptions further north，thus covering almost the whole of the Tamil country．The discovery and interpretation of these inscriptions is one of the greatest contributions to Indian epigraphy and K．V．Subramanya Aiyar has done a great service by his very valuable contribution．The present selection（Fig．68）is from the Sittanavāsal cave and the inscription is typical of the rest．

# －L甘よくt  

O．S．dol，
FIG． 68.

The script of the early Kusanas，developed from that of the earlier epoch（Sodassa， Rañjuvula，etc．）is characteristic for its squat letters，specially noticeable in $h a, y a, n a . b h a$ ， $c a$ ，etc．There is a small nail－head serif for the letters．There is a tendency for the lower ends of all vertical strokes to remain straight，except in the case of $r a . E$ is a triangle elongate topwise；$b a$ a square，$v a$ a triangle with stroke over apex，$k h a$ a triangle with curve over the apex to left，$m a$ a triangle with the sides lengthened beyond the apex and tha a circle．$A, e$ and $o$ medials are slanting top strokes to right，left and to both respectively $Y a$ has a curve in its left limb and as subscript the letter continues to be used in its complete form，i．e．，tripartite．Ca projects its belly too far left．The tripartite subscript ya becomes bipartite in later Kuşãn script．The present extract（Fig．69）is from the inscription on the sides of the umbrella post for the Bodhisattva image erected by friar Bala at Banaras （Epigraph．Ind．VIII，p．176）．

[^4]

FIG. 69.
C.S. del.


In the Western Indian caves, like Kärle, Kaṇheri, Kuḍā, etc., we get the archaic and clumsy variety as also a more advanced and beautiful variety of script. The Nāsik inscription of Usavadäta has excellent letters which contrast with the clumsy ones of his at Kärle, These letters resemble the early Mathurā variety. They have very few Southern characteristics though the Southern $d a$ is clear. The curves at the lower end of vertical strokes are very faint, bringing them nearer the northern strokes which mostly lack the curves. The vertical stroke of $l a$ does not curve to the left but to the right top, the left limb of sa

[^5]has a peculiar curve at its tip; sa slants to the right; and subscript $y a$ is tripartite. Medial $\bar{a}$ and $e$ are represented by horizontal strokes but occassionally, as in $j a$, the stroke curves upwards. Medial $u$ and subscript $r a$ are distinuished by the slight curvature in the ouse of the latter. Square patterns are obvious in letters like $p a, s a, b a, h a$, and triangles in $e, v a, m a$. The present extract (Fig. 70) is from Uşavadāta's inscriptions from Nasik ( $\mathrm{I}_{\mathrm{p}} \mathrm{g}$ graph. Ind. VIII, p. 78) the letters of which are among the finest in Indian epigraphy.
mic. 70.
O. S. del.,

1 सद्धम् राजः क्षहरातस्य क्षत्रपस्य नहपानस्य जामात्रा
दोनोकपुत्रेण उषवदातेन त्रगोरातसहस्रदेन नद्या
बार्णासायां सुवर्णदानतोर्थकरेण देवताभ्यः ब्राह्मणेभ्यश्र
षोडइग्रामदेन अनुवर्ष ब्राह्मणशतसहस्रोभोजापयिन्रा

# प्रभासे पुण्यतीर्थ बाह्मणेभ्य: अष्टभार्याप्रदेन भ रुकछ, <br> दशपुरे गोवर्षने च चतुशालावसधप्रतिश्रय <br> प्रदेन आरामतडाग उदपानकरेण इवा पारदा दमण तारप <br> करबेणा दाहानुका नावापुण्यतरकरण एतासां च नदीना उभतोनीर 

I. Gujrat and Kathiawad the southern type of seript was in vogue. This is indicated by the similarities in the Asokan script from Girnār and from Mysore. The Southern form of seript is also found in the Junăgaḍh inscription of Rudradãman (Epigraph. Ind. VIII, p. 36). This forms an interesting study in tracing a later development of the Southern variety of Gupta script in Skandagupta's inscription in the same place. Rudradāman's inscription is one of the most important of Indian inscriptions as it is the earliest yet known in Sankkrit. This is a fine example of classical Sanskrit. The poet of the inscription, whom Kielhorn describes as 'endowed with no mean poetic power' is well aequainted with the diction of the Rāmäyaña and Mahäbhärata (Ibid, p. 40) and has used phrases bodily taken from the epics. As examples, may be noted पौरजानपदं जनं and पर्जन्येन एकार्णंवभूतायामिव पृथिद्यां कृतायाम् reminding of the lines वौरजानपदं जनं (Rämäyana) and ग्रयं ह्युत्सहते कुद; कर्तुमेकाणंबं जगत् (lhid, V, 49, 20 and comment on this in Sivaramamurti 2, P. 4). Sabdālamkãra abound as for instance in quotations from this inscription, ग्रविषेयानां यौधेयानां, दानमानावमान. नाम्ना . . . . . -दाम्ना . . . रद्रदाम्ना; etc. (Epigraph. Ind. V1II, p. 41). The letters of this inscription appear to be the precursors of the Southern variety, the form being apparent in the curve at the lower end of the vertical strokes of $a, \bar{a}, k \bar{a}, \tilde{n} a$ and $r a$, the rounded form of $\downarrow a$, the leftward turn of the top vertical stroke of $l a$ and the form of medial $r$ not easily distinguished from subscript $r a$. The letter $p a$, peculiar to the Southern variety, occurs in this inscription. Though some of the letters of the Kssatrapa and contemporary SĒtavãhava $i_{\text {inscriptions like } a, k a, n a, r a \text {, ete., have a little curve at the end of the verticals, a feature }}$ which is absent in Kuşang letters, the verticals of the Kşatıapa letters slant a little before curving at the tip. The use of final consonant is illustrated by $t$ as in cisit. the letter going just below the line. The subscript consonants are written in thet mormal full furm. Mediala $\overline{\boldsymbol{a}}, \boldsymbol{e}, o$, and ai are represented usually by horizontal strokes at the top of the consonaut but sometimes this is different as in $t \bar{a}, m \bar{a}, d h a \bar{a}, m o$, etc., where the stioke curves up or down as in the first two and is added to the middle of the consonant as in the nest two. or rusp up vertical in conṭinuation of the central part as in já. Subseifi ; is ropnachued by
${ }^{2}$ Sucoess ! by Usavadatas, son of Dinika, son-in-law of King Nuhupina the Koulyirlita Kgorrapa-donior of thrve hundred thousand cows, performer of sacred gifts of gold on the irver Bñanvi, giver of sixfeery vilteges to the Gods and Brähma as, feedor all the year round of a hundred thousand Brâhma as. giver of eight wivea to. Brah raupas in the sacred place Prabhàsa, doncr of quadrangular hermitages, dwellinga and shelter louseb" ar Dharukracha, Daśnpura, Govardhana and Sorparaga, maker of pleasuances, tanks and wells, founder of free farviee by bosta on the Ibä, Pärâdä, Damana, Täpi, Karabenä and Dähänukä and on both the bankz of these riverz . . . .
${ }^{*}$ (On this see R. G. Bhandarkar in Ind. Ant. XII. p. 142).
an upward curve on top to the right and $i$ by curved strokes to right and left. Medial $u$ is represented by a bottom curve or stroke to the right of consonants with open bottom or having a single vertical stroke, as in $\boldsymbol{g u}, \boldsymbol{t} u$, etc., or $k u$, but otherwise it is turned to the left as in $m u, s u$, etc. ; $r u$ and $r \bar{u}$ however are represented by a single or double stroke to the right centre of the vertical stroke of $r$. The additional stroke to denote subscript $\bar{u}$ may be seen in blur. The following small passage (Fig. 71) is typical of the rest of this long well-engraved though damaged inscription (bid, pp. 38-39).
FIG. 71.
c. B. dd.

शब्दार्थगान्धर्व्वन्यायाद्यानां विद्यानां महतीनां पारणधारणविज्ञानप्रयोगावाप्त विपुलकीर्तिना तुरगगजरथ चर्यासिचर्मनियुद्धाद्या............तिपरबललाघव सष्ठवक्रियेण अहरहर्द्ननमानानवमानशोलेन स्थललक्षेण यथावत्र्राप्तैबंलि शुल्कभागै: कनकरजतवजूवंदूर्यरत्नोपचयविष्यन्दमानकोशेन स्फुटलघुमधुर चित्र कान्तशब्दसमयोदारालंकृतगद्यपद्य ..........न प्रमाणमानोन्मानस्वरगतिवर्ण्ज सारसत्वादिमि: परमलक्षणव्यंञ्जनैरुपेतकान्तमूर्तिना स्वयमधिगतमहा क्षत्रपनाम्ना नरेन्द्रकन्यास्वयंवरानेकमाल्यप्राप्तदाम्ना महाक्षत्रपेण रुद्रदाम्ना वर्षसहस्राय गोबाह्य ......र्थधधर्मकीर्तिवृध्यूर्थ च अगीडयित्वा ${ }^{1}$

[^6]The Nasik inscriptions of the Queen mother Balasiri, of the time of her grandson Väsisṭht putra Pulumāyi. is in the typical Sātavãhana script of the second century A.D. in the Eastern and Western parts of the Andhra empire which extended all over the Deccan from the Bay of Bengal to the Arabian Sea. This script is the parent of the later Ābhira, and Traikūtaka scripts in Western Deccan, and the Iksväku and early Pallava scripts in the Eastorn Const. The letters of the Nasik inscriptions of the Sātnvähanas resemble to some extent the script of Usavadāta's inscription from the same cave and even the Ksatrapa inscription of Rudradāman in certain cases ; but there is an individuality in these Sātavāhand letters. Dh is triangular, bia has the countour of an armless chair, cha is a large hook with small base line. $C a, p a, m a, v a, y a$, etc., resemble the letters of Usavadāta's Nasik inscription but $b a$ sometimes shows the tendency to curve inwards on the left side, a feature which is observed in the later inscriptions, specially Rudradãman's. and which develops in all later Southern and Central Indian scripts. Ya, unlike as in Ksatrapa and Kugan inscriptions, but like the letter in Usaavadāta's inscription, lacks the curl on the left. The vertical stroke of $l a ̆$ is sometimes somewhat curved to the right. The lower ends of verticals, like $\boldsymbol{r} \boldsymbol{a}, k a, a$, show a tendency to curve. Medial $\tilde{a}$, $e$, and $o$ are indicated by horizontal strokes except occassionally as in $j \bar{a}$. In some of the Sātavähana inscriptions there is a tendency to show small loops for ta and $n a$. $L a$ and $d a$ are typically southern forms. The following extract (Fig. 72) is from the inscription of the Queen mother Balasiri who got it engraved in the Nasik cave in the 19th year of Siri-Pulumãyi (Epigraph. Ind. VIII, p. 60). It is a masterly description of the prowess and grandeur of a sovereign ruler and, as a literary piece, it ranks among the hest in Indian Epigraphy.

# सबराजलोंकमडल्रपतिगहीतसासानस दिवसकरकरविबोधित कमर्लविमलसदिसवदनस तिसमुदतोयपीतवाहनस पलि पूनचदमडलससिरिकपियदसनस वरवारणविकमचारविकमस भुजगपतिभोगपानवाटविपुलदाघ सुदरभुजस अभयोदकदान किलिननिभयकरस अविपनमातुसुसूसाकस सुविभततिवगदेस कालसं पोरजनानिविसेससमसुखदुखस खरियदपमान मदनस सकयवनपह्लवरनसूदनस धमोपजितकरविनियोग करस कितापराधेपि सतुजने अपानहिसारुचिस दिजवरकुटुब विवधनस खख रातवसनिरवसेसकरस सातवाहनकुलयसपतिठापन करस सवमदल्राभवादितचरणस विनिवतितचातुवणसकरस अनेक 

From the later half of the 2nd century A.D., the Sātavăhana soript in the Krishua vary undergoes a change. The letters get elongate and more ornamental, with curls and flourishes at the ends of verticals, rather over-elongated. This tendency is to be seen in the ina riptions of the fourth period at Amarăvati (See Sivaramamurti 1 pl, LXV, 8, 10.). This ornamentation of the letters is seen at its best in the insoriptions from Jaggayvapet (Burgess pl. LXII, LXIII) and Nägärjunakonda (Epigraph. Ind. XX pI, i-r). The insorip. tions from Jaggayyapeṭa and Nägārjunakoṇ̣a are of the Ikṣvāku dynasty, of which Kingg sirivirapurisadata figures prominently. The letters are beautiful specimens. The vectiesl strokes of $a, \bar{a}, k u, \tilde{n} a, r a, l a$ and the metial $i, \bar{i}$ and $u$ are quite elongate and heautifully curled. The medial $\epsilon$ is also curled downwards in the typically Southern manner, as in the later inscriptions (Būbler, Ind. Ant. XXXIII, p. 43). $L$ peculiar to Southern toript occurs in the Nägarrjunakonda inscriptions (Epigraph. Ind. XX, p. 12). The discovery of the inscribed Āyaka pillars from Nägärjunakonḍa supplies quite an amount of material for the study of the script. The passage given below (Fig. 73) is from the sccond $\boldsymbol{A} y, k a$ pillars to the south of the Māhācaitya at Nägärjunakonḍa (Ibid. p. 18).

[^7]

FIG. 73.

# सिधम् महारजस असमेधयाजिस अनेकहिरंणकोटिगोसतसह्तकरसत सहसपदायिस सवथेसु अपतिहतसंकपस वासिठीपुतस इखाकुस <br> सिरिचातमूलस दुहुता रञ ोसिरिविरपुरिसदतस भगिनि महासेनार्पतिस महा <br> नलवरस महादंडनायकस धनकानं खंदविसाखंणकस भया महातलर्वरि <br> अटविचातिसिति अपनो उभयकुलं परिणामे[त्] न अतनोच उभयलोक हिन <br> - मुखावन्नचाय <br> भगवतो मंमसबुध् धातुवरपरिगहीनस गहाचेतिय इमं खंभं पतिठपननि रजो सिरिविरपुरिसदतस ह वा प ह दिव $90^{1}$ 

('losely alied to the . Jaggayyapeta seript is that of the Prākrt grants of the early Palla vat monarchs and the writing of these charters is a development of the earlior ornatmenti 1 type of the Ikavakus. The text of the charters in Prākrt itself indicates their early date as abo the palacography of the letters. The writing on the charters is in a highly enesive: form of the elongate letters of the Ikşvãku inseriptions (Bühler Ind. Ant. XXXIII, p. 44). The passage below (Fig. 74) is from the first plate of the Hirahadagalli plates of Sivaakandavarman (Epigraph. Ind. T, p. 2). The perfect line in Sanskrit at the end shows that the scribe was not unaeqnainted with the elassical language, but it was more in accordance with the usage of the day that the charter should be issued in Präkrt, as all royal edicts, grants and charters appear in Prâkṭt in the early conturies befove and after the Christian era. A point to be noted in the alphabet of this charter is the peenliar way in which the anuavara aud the serits are indicated hy a small orose, rather than by a dot or dish (Ibid, p, 2). There is often a confusion created by the similarity of letters like ța, $\downarrow a$ and $\downarrow a$ or ta and $\underline{n} a$, or ta and bha (Ibid, p. 2). The form of $e$ with longer vertical stroke to the right is a precureor of the same letter in later script in the Krishua valley. The medial $e$ and $o$ in the caso of ka give a different form to the letter, the small horizontal stroke slightly curvea al the ends ruming diagonally to the vertical stroke in the former (i.e. ke).

[^8]

FIG. 74.

$$
0.8 . \mathrm{del}
$$

## कांचोपुरा अग्गिटथोमवाजपेयस्समेधयाजि धम्ममहा <br> सिद्धम् ।। राजाधिराजो भारद्दायो पल्लवाण सिवखंदवमो अम्हंविसये सवत्थ राजकुमारसेनापति

Somewhat carlier than the Hirahadagalli plates are the Mayidavoln plates (Ibid VI, p. S4) of the same monarch (Fig. 75). Issued by Sivaskandavarman when he was yuvamahārāja or heir-apparent, it is distinctly older than the Hirahadagalli plates where the epithet used is dharmamahäräjädhiräja or righteons monarch. Though strictly the Mayidavolu plates ought to be given first they are given next to the Hirahadagalliones, as the letters of the latter, while agreeing generally with those of the former, however present some special forms not met with elsewhere in the whole range of the Indian alphabet. In the Mayidavolu and the Kondamudi grants the letters have similar abnormalities and hence they should go together. The grant is in Prākrt as is usual in the early grants. It is to be noted that the special form of ke, found in the Hirahadagalli grant, has its origin in this grant, Among the special letters of this grant are sa and $m a$ whether by themselves or a subscripts, as in mmo; na, ja and e (Ibid, p. 86). While $m a$ and $s a$ are totally different from any known letters, na creates a confusion by its close resemblance to da in which form it is never known $j a$ is peculiar sometimes, but it is easily traceable to the same abnormal letter in the Bhatfi-: prolu alphabet, as also the letter $h a: \quad E$ is quite different from the same letter in other insoriptions of the same date. It differs from the same letter in the Hirahadagalli alphabet.

[^9]though its form suggests strong resemblance to the later Tamil-Grantha letters in the Pallava script of the 7th century of which it is undoubtedly the precursor.



चीपुरातो युवमहाराज ो
भारदायसगोत्तो पलवानं
सिवख दवम्मो धंञकडे
वापतं आनपयति ${ }^{1}$
The script of the Mayidavolu plates is also repeated in the plates of the Bṛhatphalãyana king Jayavarman (Ibid, VI, p. 315) found in the village of Kondamudi in the Krishna district. This grant is important for the script as well as the mention of a royal dynasty, the Bŗhatphalãynas, not known from any other records. The language is Präkrrt. The last line is another notable example of the use of Sanskrit in a Prākyt inscription for reasons remarked above (see above p. 166). The letters peculiar to the Mayidavolu grant are found here also. Sa, $m a, j a, n a$ and $\epsilon$ are alike in both (Ibid, p. 315). Jut is however peculiar, in this. But while there is a confusion between $\downarrow a, d a$ and na aid na in the Mayidavolu grant by the similarity of their form there is a separate sign here for da

[^10]whin）．distinguishes it from na which in all other respects is as confusing as nu of the Magida－ volt a th．The passage given below（Fig，76）is from the first two plates of the grant．
\[

$$
\begin{aligned}
& \text { さの厂 } \times\left\{\begin{array}{c}
3 \\
\hline
\end{array}\right.
\end{aligned}
$$
\]

$$
\begin{aligned}
& \therefore \text { mme }
\end{aligned}
$$

$$
\begin{aligned}
& \text { H17. } 76 .
\end{aligned}
$$

```
विजयसधावारा
？नगरा कूडूरातो
महेइवरपायपरिगहीतो
बृहत्फलायनसगोतो
\(\rho\) राजा सिरिजयवमो अनपयति कुडूरे \({ }^{1}\)
```

The Western Indian script of the time is best represented in the carly inscriptions of the TPrsik āțakas and the Maitrakas．The plates of the Traikūtaka king Dharasena，of the middle of the 5th century A．D．，show the earlier Brähmi type of letters not developed fully into the stage represented by those of the later Maitrakas or the earliest records of the Western Càjuk－ yeas of Bädarmi．The letters belong to the Southern variety and may be compared with the archaic ones of the Pallava records in Präkrt of slightly earlier date．The angularities and breaKs involved in the engraving of letters on copper plates are clear in this as in the early Pallavs．Präkrt records．The serif of the letters is a thick short elongate dot．Sa is peculiar and ont of its arms darts up after forming a sharp narrow angle to right．The lower end of verticals of letters，like $a, \tilde{\boldsymbol{a}}, k a$ and $r a$ ，form an angle by slightly shooting up to left．

[^11]The is more or less like a spiral, ya a right-angle with vertical to right and an are to the left end of the base line, a central slanting line ending with thick serif level with horizontal dividing the right angle. $M a$ is a triangle with the sides prolonged beyond the apex and with serifs. La starts to left as a query mark without dot, runs horizontally to right and up again vertically and does not curl, as in other scripts. Va is just a triangle with serif on top. Sa is peculiarly like $y a$ of the script, except that the slanting middle line is doubled. The medial $\bar{a}, c, o$ are small slanting top strokes. The square and triangle often determine the shape of letters of the script. The script of Dahrasena (Epigraph. Ind. X, p. 53) from which the following extract is taken (Fig. 77) is special, but the later developments in Traikūtaka inscriptions show more regular forms.

##   <br> FIG. 77. <br> a.s.iel. खस्ति विजयस्कत्धावाराम्रकावासकात्र्कूटकानां मातापितृपादानुष्घातो भम वत्पादकर्मकरोश्ममेधाहर्ता श्रीमहाराजदहसेनः सर्वानेवास्मक्तन्तकानन्त म्म०ण्डलीविषयवासिनस्समाज्ञापयति यथा कापुरवास्तव्यब्राह्मणनण्णस्वामिन ${ }^{1}$

The script of the Kuṣāna period in North India is the parent of the later northern type represented by the letters of the Allahābād práasasli of Samudragupta (Fleet C. Inscr. Ind. 1II, p.1). The script of the Gupta period is characterised by three varieties, the Northern, Central and the Southern. The Allahālãd praśnsti is in the Northern class of letters which are in direct descent from the Kusãy alphabet. The Central Indian variety of Gupta alphabet is best represented by the Elan inscription of Samudragupta (Ibid, p. 18) and the Udayagiri cave inscription of Candragupta II (Ibid, p. 21), the former containing letters both of the box-headed and nail-headed type and the latter a fine series oc the box-headed variety so typical of all the Väkātaka inscriptions. The Southern variety of Gupta script, which is a clear development from the inscriptions of the Ksatrapse, is best illustrated by the Sã̃̃chi inscription of Candragupta II and Skandagupta's Junãgadia inscription (Ibid, p. 56). In addition there are other minor varieties, of which the most important is the one to be seen in the Bilsad inscription of Kumãragupta (Ibid, p.42) where the deep thick serifs, square telexes and in long straight top strokes form a striking feature.

[^12]The following passage in illustration of the first variety (Fig. 78) is from Samudragupta's Allahābād práeasti in the fine poetry of Hariṣena, the court poet. The letter ma used here is of the Indo-Seythic type. Samudragupta's Southeril contact is echoed by letters of the southern variety, like $d a$ and $l a$. The form of the vowel $o$ in some places, as in goźata in line 3 below, is peculiar.
fig. 78.
0.5. del.

सुर्चारतशताल ङ્ळृताने कगुणोत्सिक्तिभि श्ररणतलप्र मृष्टान्यनरपतिकीर्ते: साध्द्वसाधूदयप्र लयहेतुपुरुषस्याचिन्त्यस्य भक्त्यवनतिमात्रग्राह्य मृदुह्द यस्यानुकम्पावतोनेकगोशतहस्तप्रदायिनः कृपणदीनानाथातुरजनो द्वरणसन्त्र दीक्षाभ्युपगतमनस: समिदुस्ग विग्रह्वतो लो कानुग्रहस्य घ नदवरुणन्द्रान्तकसमस्य स्वभुजबलविजितानेकनर वति विभ वप्रत्य प्प र्णनित्यव्यापृतायुक्तपुरुषस्य निशितविदग्ध मतिगान्ध र्व्वललित व्रीडितात्र दशापतिगुरुतुम्बुरुनारदादे विवद्व ज्जनो रजोण्यानेक काव्यक्क्रियाभिः प्रतिष्टितकविराजशब्दस्य सुचरिस्तोतव्याने का द्रूतोदारचरितस्य लोकसमयकिक्यानुविधानमात्रमानुषस्य ${ }^{1}$

[^13]The Eran inscription of Samudragupta (Ibid, p. 20) is a fine example of the use of box-headed and nail-headed type of letters. The letters are of the Central Ludian rariety with Southern characteristics. It is only a fragment and the small extract (Fig. 79) show A the nail-headed variety in the first line and the box-headed variety in the hext two.

fig. 79 .
C. Naled.

बभूव धनदान्तकतुष्टिकोपतुल्यः
यस्य रिपवरचरणोर्जितानि
प्नान्तरेष्वपि विचिन्त्य परित्रसन्ति'
The Bilsaḍ pillar inscription of Kumāragupta (Ibid, p. 43) is in the North r 1 variety of characters with beautiful letters square and triangular in shape, thick and long scrifs and prolonged top strokes. The line given (Fig. 80) shows these characteristics very clearly.

> FIG. 80.
> C.S.slel.
> भगवतस्त्रोक्यतेजस्संभारसंतताद्भुतमूर्तब्रंह्यण्यदेवस्यं

The nail-headed type is best illustrated in the seript of the Majhgavim plates (Ibid, p. 107) of Mahäraja Hastin of 510-11 A.D. (Fig. 81). The nail-head is triangular with the apex of the triangie downwards.

716. 81.

Those enems 8 are terrified when they recollect even in their dreams....... his victories in 1, tiles.
2 Lowi Brakroany dueva of woudrous form covered with the acemaulated lustre of the timeo ven.

नमो महादेवाय।। स्वस्त्येकनत्युत्तरेब्दशते गुप्तनृपराज्यभुक्त $\frac{\text { श्रीमति प्रवर्द्धमान }}{}$ महाचैत्र्तस्वत्सरें माष मासवहुल्कक्षतृतीयायामस्य सम्बत्सर मासदिवसपूर्वा यां नृपतिपरिव्राजककुलोत्वन्नेन महाराजदेवाढ्यप्रनव्रा महाराजश्रीप्रभंजननप्त्रा महा ${ }^{1}$

The alphabet in the inscriptions of Toramāna and Yasodharman shows a beautiful development from the earlier northern and Gupta variety and in them is seen the origin of the beautiful Nāgari script. The Brähmì letters change into a type which, being intermediate between the earlier Gupta and 7th century Nägarī, approximates more to the latter, and it is easily seen that it is the parent of the lovely writing in the Banskhera and Madhuvan plates of Hargavarddhana. Ka develops a thicker and angular lower end, which later tends slowly to shoot up to the left to meet the crossed stroke in the centre. Ca develops a projecting beak to the left, as also da. Ya still continues its earlier shape, and the loop to the left does not join the central stroke, nor does the latter separate itself from the lower line to form the letter, as we know it, in inscriptions of the next and subsequent centuries. Ra definitely thickens at the lower end. In conjunct consonants, $r a$ appears sometimes above the line of the top stroke and occasionally in line with the body itself, ad in conjunction with $y a$, and rya is just a stroke with the subscript $y a$ below. La is tending towards its future shape. The passage chosen (Fig. 82) is from the Mandasor inscription of Has )dharmen (Ibid p, 146) who overcame the great Mihirakula.

mic. 8.
C.S. del.

[^14]
# आलौहित्योपकण्ठात्तलवनगहनोपत्यकादामहेन्द्रादागड्नाशिलष्ठसानोम्तुहिन <br> शिखरिण:पशिचमादापयोधे: सामन्तर्यस्य बाहद्रविणहृतमदै: पादयो <br> रानमन्द्रिशचूडारत्नाङशुराजिव्यतिकरशबला भूमिभागा: क्रियन्ते ।। स्थाणोरन्यात्र 

## णतिकृपणतां प्रापितं नोत्तमाङ्ड यस्यारिल्टषो भुजाभ्यां वहति हिमगिरिदुं ग्ग शब्दाभिमानं नीचैस्तेनापि यस्य प्रणतिभुजबलावर्ज्जनाक्लिष्टमूध्र्ना चूडापुष्पो पहारैंम्महिरकुलनृर्पेणार्चतं पादयुग्मं । $\begin{array}{ll} & \text { (गा)मेवोन्मातुमूर्ध्धं विगणयितुमिव }{ }^{1}\end{array}$

The development of the Nägari seript in the 7th and 8th centuries A.D. is interesting It is at this stage that the letters are most decorative. The script of the Lakkhāmandal praGasti (Epigraph. Ind. I, p. 10) and the Bodh-Gayā inscription of Mahānāman (Fleet, C. Inscr. Ind. III, p. 274) present certain features which suggest affinities to the earlier script. The script in Hargavarddhana's copper plate grants, though however of the same period, is a little different from the usual variety of the time, the flourishes being very pronounced for the superscripts. It resembles the script of the Jhälrāpăṭan inscription (Ind. Ant. V, p. 180), the Banaras inscription of Pantha (Epigraph. Ind. IX, p. 60), and the Deogarh rock inscription of Svāmibhața (Ibid XVIII. p. 125). The letters are very ornamental and are the most artistic in Indian calligraphy. The beauty of the letters composing the body of the inscription is surpassed only by the sign manual of the emperor in letters so beautifully and ornamentally incised that Bühler romarks, if King Harga really used these characters in signing all legal documents, he must have been a most accomplished penman, and the oares of Government and the conquest of India must have left him a great deal of leisure (Ibid IV p. 209). Hargavarddhana was an eminent poet and litterateur, an able administrator, conqueror and a devotee of his faith. King Bhoja of Dhărā is an instance of a royal polymath. Penmanship in such cases was quite a simple affair. The florid lines of these letters have real companions in the South Indian Pallava Nägarī inscriptions of similar beauty in Mahabalipuram and in the Kailāsanãtha temple at Kãñcipuram. The letters have pronounced wedges, generally to the right top of the vertical, which slants to right. A tail

[^15]is developed at the right end, which forms a short angle. This variety has been termed the scnte-angled script, and the term kutila has been discarded, though really the letters are $k u t i l a$, i.e., crooked, but beautifully so. The curved cross-stroke of the letters $k a$ does not yet join the lower tip of the vertical to the left as in later letters. Occasionally na with its loop to left, attached to the top instead of to the vertical, appears like ga and causes confusion. The subscript $y a$ is definitely curved and not like as it appears in the Mandasor inscription of Yasodharman. The superscripts $\vec{a}, i, i, e, a i, o$ and $a u$ also run in flourishes like streamers, and are not feather-shaped, as in the Mandasor inscription and resemble those in the Jhälräpāțan prasasti. The upadhmäniya is a semi-circle open above and with ourled ends. The superscribed wedge-shaped ' $r$ ' never rises above the top line, obviously to leave it free for the medial signs $\bar{a}$, $\bar{i}$, etc. The passage selected (Fig. 83) is from the Banskhera plates of Harşavarddhana (Ibid IV, p. 208). The inscription is couched in elegant Sanskrit prose.

- A A
 Wh ty






fig. 83.

ओ स्वस्ति महानौहस्न्युठ्वजयस्कन्धावारचच्छीवर्धमानकोटया महाराजश्रीनर-
वर्द्धनस्तस्य पुत्रस्तत्पादानुध्यात
इशीवजिनणीदेव्यामुत्प्नन्नः पर्मादित्यभक्तो महाराजश्रीराज्यवर्द्धनस्तस्य
पुत्रत्त्तत्पादानुध्यातर्शरीमद
प्सरोदेव्यामुत्पन्न:परमादित्यभक्तो महाराजर्रीमदादित्यवंनस्तस्य
पुत्त्रस्तप्तादानुध्यातइश्रीम हासेनगुप्तादेव्यामुत्पन्नशचतुस्समुद्रातिक्कान्तकीरित :्रतापानुरागोपनतान्यराजो

वर्णाश्रम
व्यवस्थापनप्रवृत्तचकक्र एकचक्करथ इव प्रजानार्मित्तिरःपरमादित्यभक्तःपरम

महाराजाधिराजश्री प्रभाकरवर्द्धनस्तस्य पुत्त्त्तत्पादानुध्यातस्सितयश : प्रतान
विच्छुरित
सकलभुवनमण्डल:परिगृ हीतधनदवरुणेन्द्रप्रभृतिलोकपालतेजास्सत्प प्रेपाज्जिता नेकद्रविणभूमिप्रदानसंप्रीणितार्निद्दयोतिशयितपूर्वराजर्चरितो देव्याभ मल

यझोमत्या श्रीयशोमत्यामुत्पन्नःपरमसोगतस्सुगत इव परहितैकरतःपरमभट्टारक ${ }^{1}$
The early development of Nagari in Eastern India is best illustrated by the seript of the plates of Śasãnka (ibid VI, p. 143). They are of the same time as those of Harģavarddhana.

1 Om! Heil! From Vardhamannakoti the victorious camp consisting of the great navy and elophait forces und cavalry-(There was) Mahāräje Sri Naravarddhana; his eon that contemplated on his feet was Mahäräja Sri Räjyavardhana, born of Queen Vajri, idevi and a great devotee of the Sun god; his son that contemplated on hia irst was Adityavardhans,born of Queen Apsarodevi and a great devotee of the Sun god; his son that contemplaier: on his feet wąs Paramabaţārakn (the great Lord) Mabârējadhirāja Sri Prabhekaravarddhana, born of Queen M: is genaguptadevi and a great devotee of the Sun god, whose fame crossed the four oceans, who subdued the other princer by his power and benevolence, whose wheel (of power)moved to well establish varua znd üśrama.wza removed the mikery of his subjects like the rider of the chariot with a eingle wheel, i.e., Sun god, bin ton that conkemploted on his fcet was Percmebbat of apotless feme and a greet follower of Buddha being himeelf like Buddin completely givin to coing gcod to othere, who colered the enirire glote with the cenogy of his ulife fonie, who assumed the lvalre of Kabera, Varuna, Indra and cther Lokspälee (larois of the quartere) w bo satisfied the mivels of nuprliennts by


The script though of the acute angled nail-headed type, like that of the plates of Harassvardhana, has yet certain peculiarities that mark it out from the other. The curved cross stroke of $k a$ joins the rtical from the left wherever it occurs independently and not in $a$ conjunct consonant. The left limb of $s a$ is open and not joined, as in the Banskhera plate. $D a, n a, \& a, p a, m a$ and many other letters differ. The tail to the right end is not pronounced in this script. Superscript $r a$ is above the top line and the medial strokes are simpler. Subscript $y a$ is of the earlier type. The upadhmaniya is an oval, divided by a central stroke. The script is also illustrative of the Nagari of the time in the Kalinga country. The passage chosen (Fig. 84) is from the first plate of the inscription.


FIG. 84.
C.S. dot.

ओं स्वस्ति चुतुरदधिसलिलवीचिमेसलानिलीनायां सदी़ापा
गरपत्तनवत्या वसुन्धराया गीप्ताब्दे वर्षशतत्यये वर्तंमाने
महाराजाधिराजशीराशा द्रराज्ये श्रासति गगनतल
विनिसृत भगीरथावतारिताया हिमवद्विगरेरपरि;
पतनानेकशिलासंहातविभिम्नवहि:पातालात्तज्जलोषे
मुरसरित इव विविधतरुवरुमुमसन्छन्नोमयतट ${ }^{1}$ ।
Further development of the Nagari script in the Gangetic region is to be seen in the charters of the Pratihāra kings of the 8th and 9 th centuries A.D. The letters approach the still later types and shed their affinities to the earlier Brähmi, which can be seen clearly in the script of Yasodharman's inscriptions and even in the Nagari of the 7th century A.D. $\bar{A}$ develops a full vertical stroke to right, instead of the small lower stroke to the right. The curved cross stroke of $k a$ joins the vertical to the left. The left limb of cha slants twice and forms a shape that continues in all later types. The body of $j a$ beneath the serif curves

[^16]twice like ' $S$ ', and the top end is continued slanting down to right. A small tail is added to da at its lower end to right. A loop is formed to the left of $m a$ which continues in all later forms of the letter. A blade-like strip is added over half way from the bottom to left to the curved vertical of $r a$. The left limb of $\xi a$ separates and curves at the top, and the central stroke is absent. The left limb of $s a$ is a little more open than in the earlier type. The tail to the bottom of letters is more pronounced in this script, and the serif is a horizontal stroke and not a wedge. The letters are compressed. The superscipts $\bar{a}, i, i, o$, etc., are simpler. The sign for $e$ specially is so simple that it is almost missed. The passage chosen (Fig. 85) is from the grant of the Pratīhāra king Mahendrapāla of Mahodaya (Ind. Ant. XV., p. 105).


FIG. 85.
os. del.
ओं स्वस्तिश्रीमहोदयसमावासितानेकनौ......स्त्यरवरथपत्तिसम्पन्नस्कन्धावारात्परम वैष्णव महाराजश्रीदेवशक्तिदेवस्तस्य पुत्रस्तत्पादानु तः श्रीदुयिकादेव्यामुत्पत्नः

परममाहेशवरो
महराजश्रीवत्सराजदेवस्तस्य पुस्त्रस्तत्पादा, . . सुन्दरीदेव्यामुत्पन्नःपरम्भगवती . . को महाराजश्रीनागभठदेवस्तस्य पुत्त्रस्तत्पादानुव्यात श्रीमदीसठादेध्यामुत्पत्र परमादित्य

भक्तो महाराजश्रीरामभद्रदेवस्तस्य पुत्रस्तत्पादानुध्यातः श्रीमदप्पदेव्यामुत्प
न्न: परम्भगवतीभक्तो महाराजश्रीभोजदेवस्तस्य पुत्त्रस्तत्पादानुघ्यातःश्री चन्द्र भ ट्वारिकादेव्यामुत्पन्नः परम्भगवतीभक्तो महाराजश्री महेन्द्रपालदेवः ॥। श्रावस्ती ${ }^{1}$

[^17]Still further development of this variety of Nägari is seen in the inscriptions of the Gähaḍavalas of Kãnyakubja. In this script the letters have become definitely more modernlooking. The horizontal stroke covers the entire top of the letter. The letter is compressed or attenuated and straight. The vowel $i$ is different from the earlier one. The left limb of kha has a small triangular terminal loop. Gha is no more composed of three strokes, but the central line dwindles, giving a shape like that of the letter in other Nãgari varieties of slightly earlier, contemporary and later dates. $N a$ is composed of three vertical strokes with the top horizontal, as in all later forms of the letter. The middle horizontal limb, with terminal loop and with terminal triangle, distinguishes $n a$ and bha respectively, as in all later varieties. The tail of ha to left is lengthened. The medial signs $\vec{a}, e, o$ are usually represented by vertical stroke to right, left and on both sides respectively of the letter. Some times $o$ is represented by the superscript $e$ and vertical stroke to right and $a u$ by the side strokes and superscript. The signs for $i$, and $i$ are gracefully curved at the top end. The present selection (Fig. 86) is from the copper plate of Candrädityadeva (Epigraph. Ind. XIV., p. 197), dedicating a village to the shrine of Sri Candramādhava at Candravati and is couched in fine language describing the ephemeral nature of fortune and power and the pecessity of righreous conduct.

## 






 ?
 Fig. 86.

अस्तु वो विदितिव तावदियमर्मिंत्यता जगतः कतिपयदिवसावलोकरमणीया मधुमास
कुसुमसंप
दिव सम्पत्। सततगत्वरं गिरिकटकवाहिनीपुलिनवालुकाकूटमिव दे हिनामा युरापातमधुरा:
कटुकपाकि नो दुर्जरास्तिलखला इव विषयभोगा: सदसदालोकनपराङमुखानि वेइयाविलसितानीव दुरुपचारा णीन्द्रियाणि। तदिदमस्माभिरपि सकलसास्त्राविसंवादिनीभिः प्रामाणिकीभिः स्मृतिभि : विवमृस्यषट्पंचा शदधिकसतैकदेससंवत्सरे वैसाखसिताक्षतःतृतीयायां सनिदिने अद्याक्षततृतीयायुगादि
पर्व्वणि
जनितसुरसरिद्धरणाघमर्षणे श्रीमदादिकेशावयट्टे स्नात्वा विधिवन्मन्त्त्रदेवमुनिमनुज
भूतपितृगणां
स्तर्प्पयित्वा तिमिरपटलपाटनपटुमहसमुष्णरोचिषमुपस्थाय क्षितिजलदहनपवनगगन

यजमान
तुहिनकिरणारुणवपुष मोषधिपतिशकलसेखरं समम्यर्च्य भगवतो वासुदेवस्य पूजां विधायप्रचुरपायसेन हविषा हविर्भुजं हुत्वा पितृपिण्डयजं निर्वर्वर्य उपरिलिखितग्रामा: साजलस्थलगिरिगहनगर्तोषर

The development of the Nägari script in the 11th century in Western India can be seen in the script of the grants of the Paramāra kings of the time. The Banswara plates of Bhoja of Dhārā (Ibid XI, p. 181) show letters that still retain wedges but considerably flattened and well on the way to a horizontal serif line. This top line, unlike earlier letters, covers the entire top. The letters however change and assume a different shape in later Paramãra inscriprions where the script resembles somewhat the ornamental variety of Candella given in the tables. Here sometimes $k a$ in $k u$. $k r$, etc., has a terminal loop to left for its cross stroke. The left limb of $k h a$ is a curved elongate triangle, as also that of $g a$. Ja is composed of an S-shaped left limb and an undulating vertical right limb, joined at the top by a flat. tened wedge serif. $N a$ is composed of three verticals, the central one short and issuing from

[^18]the upturned apex of the flattened wedge serif. Pha has a double curved stroke added to right, which forms a loop towards the top and slants down. Ra has a triangular central projection added to the vertical to left. The limbs of $\dot{S} a$ are separated at the top and the left one curves in to the top and has a curved triangle at its lower end. The medial, $\vec{a}, e$, etc., are as in the script of the Gāhadavālas. The passage chosen (Fig. 87) is from the charter of Bhoja whose eminence as a polymath, poet, grammarian, rhetorician, architect, yogãcärya, engineer, administrator, general and patron of letters is very well known.


> ओं जयति व्योमकेशोसौ यः सर्गाय विर्भात्ति तां। ऐंदवीं शिारसा लेखा ज गद्वीजांकुराकृतित ॥ तन्वन्तु वः स्मरारातेः कल्याणमनिशा जटाः ॥ क ल्पांतसमयोद्द। ।तटिद्वलर्यांगला: परमभट्टारकमहारा जाधिराजपरमेशवरश्रीसीयकदेवपादानुध्यातपरमभट्टारकम हाराजाधिराजप रमेश्वरश्रीवाक्वति राजदेववादानुछ्यात 9 रमभ ट्टारक महाराजाधिराजपरमेइवरश्रीसिन्धुराज दे वपादानुध्यात परमभट्टारक महाराजाधिराजपरमेश्वर श्रीभोजदेव:कुशली ॥ 1

Towards the end of the 11th century A.D. the script of North-eastern India develops certain characteristics that distinguish it as the parent of the modern Bengali. These characteristics are clearly seen in the Deopara inscription of Vijayasena (Ibid I, p. 305) of about the close of thellth century and beginning of the 12 th century A.D.The letters, though of the Northern type, differ in some respects pronouncedly, as in vowels $i$ and $e$ and consonants kha, ja, na, ta, na, ta, tha, pha, bha, ma, ra,la and sa. In Vaidyadeva's grant

[^19](Ibid II, p.347) of slightly later date the change towards the Bengali script is clearer still. Ra, usually superscript, is sometimes used in the line itself, Avagraha, the first appearance of which has been traced in the Baroda copper plate of Rästrakuta Dhruva (see Bühler p.91), is clearly used in this inscription. Bühler, on account of the definite shape of these letters towards Bengali, has named the script proto-Bengali, as the parent of the later script. The language of this inscription is undoubtedly beautiful. It has been composed by the famous poet Umăpatidhara, of whose poetic skill Jayadeva, his younger contemporary, वाचः पलवयव्युमापतिधर: धेयो कविक्ष्मापति: ।। has given his estimate along with that of Dhoyi, the author or Pavanadūta
i. e., Umãpatidhara allows his words to sprout, Dhoyī is king among poets. As may be seen from the following short passage (Fig. 88), the letters have an individuality all their own and the language is sweet but verbose, as described by Jayadeva.
उ






Fia. 88.
C.S. del.

उच्चित्राणि दिगम्बरस्य वृसनान्यर्धाद्न्नास्वामिनो रत्नालकृतिरिभ्विशोषितवपु:ःोभा:
रातंसुभ्रुव:
पौराद्याइच पुरी: ₹मशानवसतेनेंक्षाभुजोस्याक्षयां लक्ष्मीं स व्यतनोद्रिद्रभरणे सुजो हि सेनान्वय :॥
चित्रक्षौमेभचम्म्मा हृदयविनिहितस्थूलहारोरगेन्द्र: श्रीखण्डक्षोदभस्मा करमिलितमहानील रत्नाक्षमाले: वेषस्तेनास्य तेने गुरुडमणिलतागोनस:कान्तमुक्तानेपथ्यनूस्थिरिच्छासमुचितरचन :कल्पका पालिकस्य I बाहो: केलिभिरद्वितीयकनकच्छतत्रं धरित्रीतलं कुर्वाणेन न पर्यझोषि किमपि स्वेनेव तेने

हितम् ।। किन्त स्मै दिशतु प्रसन्न वरदोप्यर्धेन्दुमौलि:परं स्वं सायुज्यमसावपश्विमदशाशोषे पुनद्दास्यति।। 1

[^20]In Kalinga, inscriptions are found in three scripts, a script akin to the box-headed Southern type, a script in which there is a free admixture of Nägari and the Telugu-Canarese script of the Eastern Callukyan territory, and the third is in pure Nägari without admixture of any other characters. The Nägari script in Kalingn of the 11th century A.D. is some what different from the other varieties and is characterized by its own peculiarities to be noted presently. The script chosen here is akin to that used in the Nadagãm plates of Vajrahasta (Ibid) IV, p. 183) or the Madras Museum plates of Vajrahasta (Ibid) IX, p. 94), and is an early variety different from that used in the inscriptions of Swapneśvara in Bhuvaneśvar of the time of Aniyañka Bhima (Ibid VI, p. 198), somewhat like the North-eastern type and approximating the Sena script. $A, \tilde{a}$ and $i$ here, are different from the same letter in other scripts of the time and later. $E$ is totally irregular and, but for the hooked top to left, resembles, $r a$. Kha has rounded top, right vertical projected up and left limb bunshaped terminally, as in $g a$ and $\delta a$. TTa approaches more the North-eastern variety of Bengal. $D a$ is of earlier type. $N a$ is more or less like $l a$ but for its top stroke. $T a$ is rounded and the curve to left is rather slight. Tha approaches the Sena letter, though not so open. Dha is quite buxom. Na is very peculiar and, but for its abrupt tapering towards the top, would appear somewhat like $m a$. Bha and $s a$ are after the earlier type. Medial $i, e, \bar{i}$ and $\bar{a}$ are sometimes confused. The passage chosen (Fig. 89) is from one of the grants of the Madras Museum.


FIG. 89.
C.S. del.
of their form enhanced by the the gemset jewels; to the dweller on the crematory ground, cities teeming with inhabitants ; to the eater of alms, unfailing fortune.. Truly the family of the Senas is very clever in eupporting the poor. With embroidered silk instead of elephant's hide, with large pearl necklace placed on the chest instead of mighty snake, with sandal powder instead of ashes, with large string of sapphires put in the fingers instead of string of beads, with long tubular emeralds in the place of serpents and with an ornament of beautifal pearls in

## ओं स्वस्ति श्रीमतामखिलभुवनविनुतनयविनयदयादानदाक्षि <br> ण्यसत्यशौचशौर्य्यधैर्य्यादिगुणरत्नपवित्रगकाणामात्रे <br> यगोत्राणां विमल विचाराचारपुण्यश्रलिल्रइयालित क <br> लिकालकल्मष मषीणां महामहेन्द्राचलरोखर प्र <br> तिष्ठितस्य सचराचरगुरोःसकलभुवनिनिम्मा <br> णैकसूत्रधारस्य शशा ङ्कू डामणे भर्भगवतो गोकर्ण्णस्वामिनः प्र <br> सादात्समासादितैकराख्बभेरोपश्चमहाराब्दधवलच्छत्र <br> हेमचामरवरवृषभलान्छनसमुज्वल समस्तसाम्राज्यम ${ }^{1}$

The Pallavas usually used Grantha and Tamil for their inseriptions and there are floriated and plain varieties of this. A few of the Pallava inscriptions are found also in Nägari and a whole series of birudas are incised in this script in the Kailäsanätha temple at Käñcipuram. These birudas are in a script closely resembling the Nägari of Śri Harsavardhans. There are two varieties, the florid and the plain. The present inscription (Fig. 90) is from Saluvankuppam (Ibid X, p. 12) and is one of the early inseriptions in Nägari found in South India. The floriated variety shows beautiful flourishes and curls and peacock designs worked into the letters, specially the medials and subscripts which makes it rank with the most lovely floriated Canarese letters in the shape of swans, peacocks and other birds (see above p. 34).

[^21]




FIG. 90.
C.S. del.

> श्रीमतोत्यन्तकामस्य
> द्विषद्द्प्पापहारिणः श्रीनि
> धे: कामरागस्य हराराघनसंगि
> न: ।1 अभिषेकजलापूर्णें चित्ररत्नां बुजाकारे आस्ते विशाले सुमुखः शिरस्सर सि शांकरः।। तेनेदं कारितं शम्भोर्भव नं भूयते भुव: कैलासमन्दरनिभं भूभृतां मूध्नि तिष्ठता।। भक्तिप्रह्नेण मनसा भवभूषणं
> लीलया दोष्णा च यो भुवन्धत्ते जीयात्स श्रीभरहिच
> रम् ।। अतिरणचण्ड: पतिरवनिभुजामतिर
> णचण्डडेशवरमिदमकरोत् इह गिरितनयागु
> हगणसहितो नियतकृतरतिर्भवतु पशुपति।। ${ }^{1}$

Further development of Nägari in South India may be seen in the unique Paliyam copper plates of Varaguna. The copper plate begins on the first side in Tamil and from the second side of the first plate onwards, it is Nãgari. The alphabet has affinities somewhat to the script of the Atiranacandesvara cave temple inscription just discussed, but represents a slight development resembling the script of the Talegãon plates of the Rãştrakūṭa Kṛ̣ṇa I (Ibid, XIII, p. 275). The inscription is important as the only known example in Nägari from the extreme south of India. It is of the 9th century A.D. and is, as pointed out by Gopinath Rao, of a chieftain of the Āy family of Aikkuḍi near Sengotttai that was subdued by Varaguna Pāndya in the 8 th century A.D. The selection is from the second side of the first plate (Fig. 91) of this grant (Trav. Arch. Ser. I, p. 187).

fig. 91.
C.S. del.

[^22]

FIG. 92.
The use of Nägarí in South India has not been much. The Pallava inscriptions are the earliest to use it. Nägari was used for the legends on coins in the early Cola issues of Uttama

[^23]Cola, Rājarāja and Rājendra Gangaikondān (Fig. 92). Similarly Nägarī was used for the coin legends in Ceylon, e.g., Parākramabāhu, Vijayabāhu, Līlāvati, Sāhasamalla, Dharmãsoka, Bhuvanaikabāhu, all of which are similar to the coinage of the great Coḷa emperor Rājarāja (Smith, p. 327). Nāgarī was used on coins from Kerala also, and the coin with the legend Virakeralasya on obverse and Gandarañkusasya on reverse of about the 13th century A.D. is an example. There is a rare instance of use of Nägari on a copper plate from the border of the Cera and Panndya country, but in Cola territory, the script used for inscriptions is only Grantha Tamil or Vatteleluttu. In the area of the Pāṇ̣yas, Nāgarī has been used for the legends of some coin types, which Elliot considers the earlier series (Elliot, p. 119 and pl. III, p. 129). In the Ceylon type of Pānḍya coins, Nägarí is not used and the legend is in Tamil. So either this Nägari should be before the 11th century or after the 12 th century, but, considering the letters, the latter seems more probable and probably the use of Nägari in Ceylon and Cola area influenced the adoption of Nägari in Pāndya territories also. The type of letters used and the central lines separating the rows of letters, as in the case of Hoysala coins with Canarese legends, like Talakädukonda or of the late Vijayanagara coins with Nägari legends, warrant this assumption. From the Vijayanagara period onwards, Nägari is used profusely for all copper plates, the signature alone being in Canarese Telugu. It is also used for coin legends. The type used here is known as Nandinãgari, and is a debased variety of the earlier Yädava and Kākatīya Nãgarí.

The earliest instances of the use of Nägari either in Western India or the Deccan are in the Samangad plates of Dantidurga and the Pattadakal pillar inscription of Kirttivarman II (Epigraph. Ind. III, p. 1) from which latter the present extract (Fig. 93) is taken. Fleet opines that these characters stand midway between the characters of the Bodh-Gayā inscriptions of Mahãnãman and the Samangad copper plates, as the former shows a further stage of development. The letters here have a triangular top with apex downwards, wherever the letters admit of it, as in the case of $k a, k h a, c a, j a, t a, d a, n a, p a, b a, b h a, m a, y a$, $r a, l a, s a, s a, h a$. The letters $p a, m a, s a, s a$, and $y a$ have a top line, not yet fully developed. Nāgari is about this time already in vogue in the Pallava area further to the South-East, as there are inscriptions of the close of the 7th century in places like Sáluvañkuppam and Kãñcipuram. In the Deccan and Western India, Nāgari was later freely used by the Rāsţtrakūțas, who succeeded the Western Cālukyas of Bādāmi. The inscription, from which the following extract is taken, belongs to the last of the Western Callukyas of Bädāmi. This and Pallava Nägari thus represent the Nägari type occurring for the first time in Deccan and South India and in vogne in the 7th-8th centuries A.D. Further details about the extent of use, development, etc., Nāgarī in South India already discussed may be seen above (p.187).


Further development of Nägarï in the Deccan is illustrated in the Talegãon plates of the Rāstrakūṭa king Kṛ̣̣narāja I (Ibid, XIII, p. 275) wherein the letters show an approach towards the type of Nägarī used in later Rāstrakūṭa inscriptions. This changes in form may be seen in the letters composing the inscriptions of Rāstrakūta Krṣna III. The Bagumrā plates of Indrarāja III of 915 A.D. (Ibid, IX, p. 24), may be quoted as examples. The present

[^24]selection is from the second of these grants (Fig. 94). The full top stroke of $a, \bar{a}$, with sign of elongation of the earlier type from the centre of the vertical to right, the peculiar open triangle for the left limb of kha, ga, and $\delta a$ are noteworthy. Gha, $d a$, and $\overline{8} a$ with central stroke are of the earlier type. $\quad N a$ and $n a$ are nearer the later varieties. $\quad S \quad a$ has a stroke across, instead of aslant. Ra is more or less like the Eastern Ganga letter of the 11th century A.D.


## कृत्वास्पदं हृदयहारि जघन्यदेशे स्वरं पुनर्मुदुविमर्द्य च मध्यदेशां यस्यासमस्य समरे वसुधाङ्जनाया: कान्चिपदे पदमकारि करेण भूयः ।। आसेतो: सा नुवप्र प्रवलकपिकुलोल्लूनफ़ुल्लल्लवड्ञादा कैलासाद्रवानीचलचरणरणन्नूपुरो न्नादितान्तात्। यस्याज्ञां भूमिपाला: करमुकुलमिलन्मैलिमालायमानामान स्रैरू त्तमाड़्भेंरवनितललुठज्जानवो मानयन्ति ॥ जित्वा जगन्निजभुजेन पुर्नज्जिगीषो : स्वग्ग०

विनेतुमिव तस्य गतस्य राजः ॥ तत्राभवत्परमधाक्नि पदे पितृव्यः श्रीकृष्णराजनृप तिः प्रथितप्रतापः ।। दिक्सुन्दरीवदनचन्दनपत्र भंगलीलाय मानधनविस्तृतकान्तकी ${ }^{i}$
Though many inscriptions of the later Calukyas are in the Canarese script, unlike those of the Rāstrakūṭas, most of which are in Nägarī, there are yet some in Nägarī, as the earlier

[^25]tradition of the Rāștrakūțas persisted and later specially the Yādavas and to a certain extent the Käkatiyas continue to use the script. The script of the later Western Cälukyas of Kalyān is more or less a settled type, approximating to the modern Devanägari. The Nilgunda plates of Vikramăditya VI (Ibid, XII, p. 142) are an example of this script of the 12th century A.D., but the most neatly executed, but somewhat defaced, inscription of the time and reign is the Sitābaldi inscription (Ibid, III, p. 304) from which the present extract is taken (Fig. 95).


FIG. 95.
C.S. del.

ओंस्वस्ति राकनृपकालातीतसंवत्सरांतर्ग्गतदराशतयत्र अष्टत्यधिकसकु १०० ८प्रभवसं वत्सरे वैशाखसुधतृतीयासुक्रदिने अद्ये ह समस्तभुवनाश्रयश्रीपृथ्वीवल्लभम हाराजाधिराजपरमेशवरपरमभट्टारकसत्याश्रयकुलतिलकचालुक्याभरणश्री मतिभुवनमल्लदेवमहीप्रवर्द्धमानकल्याणविजयराज्ये । तत्पादपद्मोपजीवीलत ${ }^{1}$

The next stage of development of Nägarĩ in the Deccan is marked by the script used by the Yädava kings of Devagiri. The script used here closely resembles the rude variety of the late Cälukyan Nägarī used in the Nilgunda plates which is a contrast to the neat and beautiful letters of those in the Sitabaldi inscription. These rudely incised letters are the parent of the still more clumsy letters of the Vijayanagara grants. The letter $i$ is well on its way to the modern type, as seen in Vijayanagara script. Na and tha of both this and the contemporary Käkatīya script approach the late Vijayanagara form. Dha is peculiarly Tike $\beta a$ without the top stroke. $B a$ for the first time has a stroke aslant on its belly, and this is continued in Vijayanagara script. The left limb of $a a$ of the earlier type is slightly

[^26]lower and a small stroke connects it with the top line. The passage chosen for illustration (Fig. 96) is from the Thāṇa plates of the Yādava king Rämachandra of the 13th century A.D. (Ibid, XIII, p. 198).

# पादन्यासभरातिरेकविनमत्पृथ्वीमिथ:संमिलत्सप्तां भोधिपयः प्रवाहकलनावित्रस्तविश्यत्र याः। चंचत्कौतुककंदुकीकृतकुल क्षोणीधरश्रेणयो हेरम्बस्य जयंति दानरभसभ्रांतालयः केलयः ।। १ बिभ्राण स्तुहिनाद्रिमोंलिविलसल्लीलाम्रलीलां भुवं दंष्ट्राग्रेन जगत्त्रयीमवतु स कीडावरा हो हरिः।यस्यांगव्यतिषंगिणी प्रसृमरा सा क्वापि सप्तार्नवो नव्योन्निद्रतमश्रमांबुक <br> णिकासंदेहमभ्यस्यति ।। २ आस्ते पयोधिप्रतिमो यदुनां वंशः प्रतीतो भुवनश्रयेपि। ${ }^{1}$ 

The use of Nägari script continued during the Vijayanagara rule in South India and the Deccan, and its peak was from the 15th century onwards. Canarese and Tamil Grantha was also used but Nägarī was the dominating script at least for the copper plate grants. The signature was usually in Canarese, either in the king's name as Śri Harihara, etc., or in the name of the deity Śri Virüpd́ksa, Śri Triambaka, etc. The Nãgari used is known as Nandināgarī and is a clumsy derivative of the earlier Yädava and Kăkatīya scripts. The illegible nature of the script and clumsy formation of the letters is, as Burnell thinks, probably due to the slow deterioration owing to the practice of writing on palm leaves (Burnell p. 53). Rounded letters, like Telugu, Canarese, etc., lent themselves for beautiful writing on palm leaves while the angularities of Nägari led to deterioration. The peculiarities to be noted in the script are that bha and $t a$ are almost alike, tha and $d h a$ are like modern Nägarī $d h a$ and tha respectively. The triangular formation to right top of kha characterises it. $G a$ is peculiarly like modern Nãgarī $\bar{u}$. Na has no terminal loop for its horizontal middle limb. Ba has a stroke against its belly. Ra is composed of a top and middle stroke against

[^27]the vertical one. $S a$ is simpler than the earlier letter. The passage chosen (Fig, 97) is from the Satyamaǹgalam plates of Devaraya II, illustrative of the script of the 15th century A.D. and resembles the Da ndepalle plates of Vijayabhüpati (Epigraph. Ind. XIV, p. 68).
FIG. 97. C.S. del.

> भूयस्यै भवतां भूत्यै मूयादाइचर्यंकुजःः।
> विहारविपिनं यस्य विदुवेंदान् पुराविदः । क्षे मं व: प्रचुरीकुय्य त् क्षोणीमभ्युदहतनयं कोडा कृतेरमूबस्य कीडापल्वलमंबुधिः। अस्ति क्षी रार्णबोम्बूतमपां पुष्पमनुत्तमं। अम्लानं यद
> निर्माल्यमाषत्ते शिरसीखवरः। सदामोदनिधेस्त
> स्य संतानो यदुसंज्ञया। अभूदाशचर्यमाधुर्यं वसु
> धायास्तप: फलं। संगमो नाम राजासीत्सारभू तं तबन्वये। प्रजानां यः समस्तानां प्रमोदो भूर्ति मानिब सर्वरलनिषेस्तस्य संग्राडासीत्तनूभुवां
> मष्ये वुककमहीपालो मणीनामिव कोस्तुभः $11^{1}$

[^28]The development of the script in Central India may be seen in the evolution of the boxheaded letters which show southern characteristics. A very early inscription with letters of the box-headed variety is the Eran stone inscription of Samudragupta. In this inscription both the box-headed and nail-headed varieties occur as already pointed out (see above p. 172). The Udayagiri cave inscription of Candragupta is another early one in this script. But it is the Vākātaka inscriptions that are the most important of the box-headed variety. The Nachne-ki-talāi inscription of Mahārāja Pṛthvisẹna (Fleet C. Inscr. Ind. III, p. 233) is a very early one among the Vākāţaka inscriptions. The letters are not shapely, as Vākātaka characters usually are, but the box-head is quite clear. The later charters of the Vākātaka family are well shaped and are typical specimens of this variety. The letters are quite angular and, though not attenuated, are more heightwise than breadthwise. But in the further development of this script, to be seen in the plates of the Kings of Somavamsa, the letters are more elongate heightwise and the crossing lines usually slightly extend beyond their limit giving special peculiarity to them, which distinguishes them from the normal earlier variety The box head is found in the case of almost all the letters, including sometimes even in the letter $j a$ that does not lend itself to it, but some letters like $e, b a, l a$, etc., lack it. Ja has this box-head sporadically. It has it in the Siwani plates of Pravarasena II (Fleet, Ibid, p. 243) but not in the Dudiya plates of the same monarch. I has a small central vertical stroke. Kha has a regular oblong base as in other box-headed varieties. Ba has a square indentation in the middle of its outline to left. The medial signs are simple and like those of the contemporary early Pallava series, except that $u$ and u are more angular. The passage chosen (Fig. 98) is from the Dudiya plates of Pravarasena II (Epigraph. Ind. III, p. 258),


EIO. 98.

# टृष्टम् प्रवरपुरत् अग्निष्टोमप्तोर्म्यामोक्थ्यषोडस्यतिरात्रवाजपेयबृहस्पति मत्रसाद्यस्₹चतुरइवमेधयाजिनः विण्णुवृद्धसगोत्रस्य संम्राट: वाकाटकाना॰्म 

हाराजभीप्रवरसेनस्य सूनो: सूनोःअत्यन्तस्वामिमहाभैरवभक्तस्य अंसभारस
न्निवेशि नगिवर्विड्डोो्रहनशिन वमुपरितुष्टसमुत्पादितराजवंशानाम्पराकक्र
माधिगनभागरारध्यमलजलमूद्धांभिषिक्तानान्दशाइवमेधावभृतस्नातानाम्भा
गभिवानामात्राराजश्रीभवनागदोहिन्रंस्य गौतमीपुत्रस्य पुत्रस्य वाकाट
कानाम्महराजश्रीहर्दसेनस्य सूनो अत्यन्तमाहेरवरस्य सत्यर्ज्जवकारुण्य ${ }^{1}$

The Kadambas along with the Vākāṭakas had not only political but marital relat:onship with the Guptas and Gupta influences naturally can be observed. An important affinity is noticed in the box-headed seript used in the early Kadamba inscriptions. The most perfect example of this variety is in the Tälagunda inseription of Kåkusthavarman. The letters are long, narrow and artistic. The spread of the box-headed variety in the South, through the Vākāţaka area, is observed in the Kadamba, Early Western Gañgu, Śálankāyana and early Pallava inscriptions of about the 4th-5th centuries A.D. The Tālagunda inscription supplies the most regular and artistic writing among early Kadanba inscriptions and this is greatly due to its being engraved on stone, unlike those of Mrgesi. varman on metal plate (Ind. Ant. VII, p. 37 and Epigraph. Carn. IV, p. 136). Among rowels $i, a$ and $e$ are noteworthy, the first lacking the central stroke occurring in the Yâkātaka letter. The letters $k h a$ and $j a$ lack a rectangular base and the box-head res. pectively, as in ths Väkätaka script. Note-worthy letters are da and sha, $t a$ and thä, the latter with the circlet in the centre, $b a$ with the small inward indentation to the leftand $l a$ with its long and beautifully curved tail end. Thesubscript $n a$ and $y a$ may be noted. Medial, $\bar{a}$ as it occurs in two ways in the case of $n a$, i.e., in continuation of the letter or as an

[^29]additional mark, is noteworthy. The medial marks for $i, \bar{i}, \bar{u}$ an $i ;$ are ornstiontal and $n$ rather unobtrusive. Final $m$ is denoted by a miniature ma slightly below the line. The passage ohosen (Fig. 99) is from the Tälagunda inscriptioa of Käkusthavarman discovered by B. L. Rice in 1894 (Epigraph, Ind. VIIL, p, 21). It is in fine Sanskrit vorse and moshly in a peculiar metre not so far described in any treatise on prosody. The poet is Kubja, one of the nnteworthy contributors to Sanskrit literature preserved in inscriptions.


Fig. 99.
cs. dei.

अथ बभूव द्विजकुलप्रांशुविचरद्गुणन्द्वंशुमण्डलम्न्यार्षवर्ममहरितीपुत्रमृषिमुस्यमानव्यगोत्रजम्।। विविधयज्ञावभृथपुण्याम्बुनियताभिषेकार्दमुर्द्ध जम् प्रवचनावगाहनिष्णातविधिवत्समिद्धाग्निसोमपम्।।
प्रणवपू०्वंषड्विधाध्येयनानर्द्यमानन्तरालयम् ।। अकृराचतु म्मास्यहोमोष्टिपशुपाब्वर्णश्राद्वप ौष्टिकम् अतिथिनित्यसंश्रितावसथसवनत्रयावन्ध्यनैत्यकम् गृहसमीपदेशसंरूढविकसत्कद+्वकपादपम् ॥

## तदुपचारवत्तदास्य तरोस्सानाम्यसाधर्म्यमस्यतत् प्रववृते सतीर्त्थ्यंविप्राणां प्राचुर्य्यतस्तद्विशे

षणम् ।
एवमागते कदग्बकुलेश्रीमान्बभूव द्विज्जोत्तमःनामतो मयू ररार्म्मेति श्रुतशीलशौचाद्यलंकृतः
In the Kalinga and neighbouring areas the script used about this time was of the boxheaded type. A beautiful inscription of the Nalas, a dynasty of rulers of this area, shows letters approaching in beauty those of the Tălsgunda inscription. This inscription at Podāgadh in the Jeypore agency of Visakhapatnam district (Fig. 100) is the only inscription on stone of the Nalas yet discovered (Itid XXI, p. 153). The letters are more rounded than in the Tālagunda inscription where they are distinctly compressed narrow and heightwise. There is no box-head for $j a$ as sometimes in the Vākātaka letter, and $b a$ has no inward indentation to the left, as in the Vākātaka and Kadamba letter. Final $m$ is represented by a miniature ma below the line. The marks of medial vowels and some ligatures are drawn with flourishes which however are not so sweeping as in the Tälagunds inscription.


Fig. 100.
css. del,

## सिद्धम् ॥ हरिणा जितं जयति जेष्यतीव्येषगुणस्तुतिर्न्न विभोः ननु भगवानेव जयो जेतव्यं चाधिजेताच ।।। श्रीनलान्वयमुक्स्यस्य विकक्रमक्षपितद्विष:

[^30]
## नृपतुर्भवदत्तस्य सत्पुत्रेणाव्यवस्थिताम् ॥ भ्रष्ठामाकृइयराजर्दिं <br> शून्यमावास्य पुष्करीम् पितु पितामहानाइच जनन्या+क्कृतिनानता ${ }^{1}$

The use of box-headed script for the Kalinga inscriptions may be noticed in some, if not all, wherein the unmixed Southern type of letters is used. The Rägolu plates of Saktivaiman (Ibid XII, p. 1) and Bṛhadprosṭha plate of Umāvarman (Ibid, p. 4) present the best examples. The box is filled and is not marked in outline, as in the regular box-head letters of the Vākātaka and Kadamba inscriptions. The letters are buxom, and nut narrow and artistic, like the onces in the Tâlagunda inscription. The following passage is from the Rāgolu plates; (Fig. 101).


Fig. 101.
c.s, del.


Another early Eastern Gang inscription, dated in the 39th year of the Ganda era, is chosen for letters showing the box-head type. The box-head is not very prominent, as in the Vākātaka or Kadamba inscriptions, though it is sufficiently obvious. The letters

[^31]are more buxom and not narrow like those of the Tälagunda inseription and the medial vowels aro not expressed with flourishes. The following passage (Fig. 102) is from the Tirjingi plates of Ganga Indravarman (Ibid XV, p. 281).


Fig. 102.
c.s. del.

> स्वस्ति अमरपुरप्रतिस्पर्द्धश्रीमदृन्तपुरान्द्र गवतस्सकलभु वनतलोत्पत्तिस्थितिप्रलयहेतो: परमंग्वरस्य सततप्रणा
> मावाप्तः पुण्यसञ्चयप्रभावनिरस्तारोपदुरितो गाड्जामलकुल
> गगनतलसहस्रर रिम: अनेकचातुर्देन्तसम विजय
> विमलविकोरानिस्त्रिङइाधारासमाक्रान्तनकलसामन्त
> नृपतिमण्डलाधिपतिः मकुटनिहितरुचि रपद्यराग
> प्रभाप्रसे कपरिष्वड्जपिड्जा ड्डीकृतचरणयुगल: ${ }^{1}$

The box-head loses its prominence in the Ganga plates of a slightly later date, though it can still be distinguished. The Acyutapuram plates of Indravarman (Fig. 103), dated in the 87th year of the Ganga era, (Ibid III, p. 127) and later than the prerious one by half a century are examples. The letters are definitely squat and dumpy. The loop for $n a$ is separated from and joined to the vertical line, as in Nägari. Medial is indicated by an upturned crescent or circlet in a large loop above the letter. Ba as usual lacks the usual indentation to left.

[^32]






Fig. 103.
c.s. del.

> स्वस्ति सर्व्वर्तुरमणीयाद्विजयलिड्ननगरात्सकलभुवननिम्म्माणैक
> सूत्रधारस्य भगवतो गोकण्णास्वामिनइचरणकमलयुगलप्रणामा
> दपगतकलिकल ङ्को विनयनयसम्पदामाधारः स्वासिधारापरि
> स्पन्दाधिगतसकलकलिड्नाधिरांज्यइचतुरुदधितर ङ्नमेख लावनित
> लप्रविततामलयशा: अनेकसमरसंक्षोभजनितजयशब्दो
> गाड्नामलकुलप्रतिष्ठ: प्रतापातिशयानामित सम स्तसामन्त ${ }^{1}$

The box-headed type of script occurs in the early Pallava charters of about the Eth century A.D. The Māngalūr (Ind. Ant. V, p. 154), Uruvapalli (Ibid, p. 51) and Pikira (Epigraph. Ind. VIII, p. 159) grants are examples. The letters of the Pikira and Māngalür grants are not so well-shaped, as in the Uruvapalli grant, in which the box-head is clearly depicted, as in the Vilavatti grant. The box-head in the case of these grants is a little smaller than in those of the Vākātaka and Kadamba inscriptions, but is nevertheless clear. This represents the box-head as it occurs in the Tamil area, and the script has its echoes in Java in the inscription of Purrnavarman, the script of which closely resembles that in Pallava grants. Among vowels, $e$ and $u$ are to be noted. The medial vowels are drawn with ornamental flourishes which to an extent approach to the grace of those in the Tälagunda inscripsion as $i, \bar{i}, u$, the last occurring in two forms in the usual mode and downward curve, as in gu and $b h u . \bar{u}, e$ and $r$ are also similarly drawn. In all these cases the signs are similar in these allied inscriptions. $O$ is specially peculiar in the case of lo. Among consonants $j a$ does not have a box-head as sometimes in Vãkãtaka script. Ta has a loop which na lacks. Among subscripts $y a$ and $r a$ are drawn with flourishes. The final $m$, as in Pallavănăm, is

[^33]expressed by a smaller letter below the line, as in the Talagunda inscription. The example chosen here is from the Pikiria grant of Simhavarman (Fig. 104).


Fig. 104.
os. del.
(©) जितम्भगवता स्वस्तिश्री विजयस्कन्धावारान्मेन्मानूरावासकात्परम ब्रह्मण्य

## १ स्य स्वाहुबलाज्जितोज्जितक्षात्रतपोनिर्धा्वंधिविहितसर्व्वमय्यादस्य स्थितिस्थितस्यामितात्मनो महाराजस्य पृथिवीतलंकवीरस्य श्रीवीरवर्म्मण:

$$
\text { प्रपौत्रो }{ }^{1}
$$

The best example of box-headed script in the Pallava area is to be seen in the Vilavatti plates (Fig. 105), in which the letters are even more beautifully shaped than in the Uruvapalli plates. The box-head is clearly marked, though the size is smaller than in the Vakataka and Kadamba letters. Some of the letters in this grant are nail-headed or arrow-headed and the occurrence of the box-head together with the nail-head reminds us of the Eran Gupta inscription. The noteworthy point about the letters is that, in the case of $a$ and s $a$, the small curl to the right inside, as in the other inscription, is here a neat small square. $B a$ has sometimes an inward indentation to the left, which is not invariable. The box-head for $g a$ and $\delta a$ is absent. $N a$ and $t a$ are distinguished by the absence and presence of the loop. $J a$ also lacks a box-head which sometimes occurs in the Vākāţaka letter. Final $m$ and $\boldsymbol{t}$ are expresssed by miniature letters below the line. In this particular inscription the peculiar Tamil letter $a$ occurs. Medial $i$ is expressed by curling one end of the loop. Sha has a rectangular bottom. The following passage is from the Vilãvațti plates of Simhavarman (Ibid XXIV, p. 296).

[^34]

Fig. 105.

> स्वस्ति जितं भगवता भीविजयपद्वृकराधिष्ठाने परमब्रह्णण्यस्य स्वबा हुन्निज्जिताज्जितक्षात्रतदोनिषे: विपिविहितसर्व्वमर्य्यादास्थितिस्थित स्यामितात्मनो महाराजस्य पृथिवितलैकवीरस्य श्रीवीरवर्म्मण: प्रपो व्रस्यात्युच्चितर्शक्तिसिद्विसम्पन्नस्य प्रतपोपनतराजमण्डलस्य भग ${ }^{1}$

Closely akin to the letters of the Uruvapalli grant and the Tälagunda inscription in the general features and ornamental formation, are the letters of the Western Ganga plates of Madhava II (Fig. 106) from Penukonda (Ibid XIV, p. 334). The only difference is that the box-head is lacking. This variety leads us on to the Western Indian script of which the Valabhi inscriptions and the Western Cālukyan, Rāṣtrakūta and other Canarese ones are the most noteworthy, as the Yādava and Gurjjara inscriptions invariably, and Rāģtrakäta inscriptions frequently, used Nägarĩ, and this line of development from Brähmi merges in the Canarese-Telugu variety. The box-headed type continues with reinforced angularities and emphasised box-head in the grants of the kings of Sarabhapura and other inscriptions from Central Indian till about the 8th-9th century A.D. This inscription, along with others of fte time in South India, begins with such expressions as Jitam Bhagavatá which may be found in the early Pallava inscriptions noted above. In the Western Ganga plates this is amplified and followed by the lines Gataghanagaganäbhcna Padmanäbhena. It is to be noted that the inward indentation to the left for $j a, p a, b a$ is pronounced, $y a$ is so formed that there is a regular loop to the left, $l a$ begirs with a larger curl larger than its compressed belly.

[^35]

Fig 106.

## (©) जितम्भगवता गतघनगगनाभेन पद्यनाभेन श्रीमज्जाह, नवेयकुलामल व्योमभा स्वस्ति सनभास्करस्य स्वभुजजवजयजनितसुजनजनपदस्य दारुणारिगणविदारणरणोप लन्ष्रप्रणभूषणस्य काण्वायनसगोत्रस्य श्रीमत्को द्रणिवर्म्मधर्म्मंमहाधिराजस्य 1 त्रस्य पितुरन्वागतगुणस्य नानाशास्त्रार्त्यसद्रावाधिगमप्रणीतमतिविशेषस्य नीतिशास्त्र स्य वक्तृप्रयोक्तृकुरालस्य सक्यक्प्रजापालनमात्राधिगतराज्यप्रयोजनस्य श्रीमन्मा ${ }^{1}$

The development of the Southern variety of Gupta script in Western India and Northern Deccan is found mainly in the inscriptions of the Traikittakas, Maitrakas and the Western Calukyas. Of these, the Maitraka records are in a script that follows palsegraphically the Junagadh inscription of Skandagupta (Fleet C. Inscr. Ind. III, p. 56) with frequent affinities to the Mandasor inscription of Kumāragupta (Ibid, p. 79). These letters are at once buxom. and more angular in their contour than those in the Western Callukyan, though the angularity is not so pronounced as in Vākātaka and Somavamsi letters. The projecting lower end of letters like $a, \vec{a}, k a, r a$ form an open rectangle. Visarga is indicated by two dashes rather than dots. Similarly dashes take the place of dots in $i$. Ca is more after the earlier Western Indian type. The loop of $n a$ and $\dot{n}$ is broken, as also the central stroke of $k a$, and the limbs are indicated by separate bits of strokes. As in ca, so in bha this separate formation of the neck of the letter is lacking. $M a$ and $s a$ follow the Southern variety of the Gupta letter in toto. $Y a$ is still of the earlier type, lacking even the indications of a loop to the left. The tail of $l a$ which encircles the body appears more prominent. Va has the contour of a cone

[^36]with the top cut, as, like ca and sha, the neck of the letter is undeveloped and the earlier Kuşan and the Traikaţaka type is continued. Ga and sta lack the inward terminal curve of the left limb, as in contemporary Western Cajlukyan, and sa has the usual central stroke. Subscript $r a$ is drawn somewhat flattened. The passage chosen (Fig. 107) is from the Palitānā plates of Dhruvasena. I, the Maitraka king of Valabhi, dated in the Gupta year 210 i.e., 529 A.D. (Epigraph. Ind. XI p. 109).


Fie. 107.
> O.S. dol.
> (Q) स्वस्ति वलभीतः प्रसभप्रणतामित्राणां मैत्रकानामतुलबलसंपन्न मण्डलाभोग संसक्तसंप्रहारशातकलब्धप्रतापः प्रतपोपनतदानमनार्ज्जवोपार्जितानुरगोनुख्त मौलमृतमित्रश्रेणीबलावप्तराजश्री: परममाहेश्वरस्सेनपतिश्रीभटक्क: ${ }^{1}$

The parent of the Canarese-Telugu variety of script is the early Calukyan script that spread both in the west and east. The earliest Eastern Cąlukyan script is but essentially similar to that existing in Pulikefin's time in his own western territory. The script in the 6th century Bädāmí cave inscriptions of Mańgalesa (Fig. 108), the Aihoḷe and Pattadakal inscriptions marks an initial stage. The earliest Kadamba, Western Gang also contribute to the formation of the regular Canarese-Telugu variety. The script in Mangalesa's time shows certain peculiar features, which suggests the existence even then of certain peculiarities that occur in the letters at a later stage in their development. For instance, two types of the lower limb of $\bar{a}$ and $a$ as a curved flourish and as compressed open rectangle; $k a$ and $r a$ with the lower limb closed to the left or open. The scribes seem to vacillate here. The left Limb of $g a$ and $6 a$ curves in terminally. Na usually, and $\eta a$ always lacks a loop but they are both derived from the looped ones. Ta, though lacking an actual loop, suggests a cursive development from a loop, the broken part of which may be noted, and later development makes this clear. $Y a$ is looped and is akin to the earlier northern form. The peculiar shape of $k h a$ is to be noted. Medial $i$ in this, as in the later development, is shaped like a circle and $\bar{i}$ as an incomplete circle with curled left end. AA cursory form of medial $\bar{u}$ is seen in $p \bar{u}, b h u \tilde{u}$, etc. The following passage is from the Bādāmĩ cave inscription of Mangaléa (Ind. Ant. VI p. 363 ; X p. 58).

[^37] मही区







 300
 Hy Hicine

Fig. ${ }^{7} 108$.
C.S. del.

स्वस्ति । श्रीस्वामिपादानुध्यातानाम्मानव्यसगोत्रणाङहारितीपुत्राणाम् अग्निष्टोमाग्निचयनवाजपेयपौण्डरीकबहुसुवर्ण्णाइवमेधावः भृथस्नानपवित्रीकृतरिरसां चल्क्यानां वंशो संभूतः शाक्तित्रयसं पत्नः चल्ल्क्यवंशाम्बरपूर्णणन्द्रः अनेकगुणागंणालंकृतशरीरस्स बर्वशास्त्रार्थ्थतत्व निविष्टबुद्धि राबलपराक्कमोत्साहसंपन्न श्रीमड्न लि श्वररणवि
कक्रान्त: प्रवर्द्धमान राज्यसंण्वत्सरे द्वादरो शकनृपतिराज्याभिषेकसंव्वत्सरे ष्वतिक्कान्तेषु पञ्चसु शतेषु निजभुजावलम्बितखड्गधारानमितनृपतिशिरोम फुटमणिप्रभारण्जितपादयुगलइचतुस्सागरपर्य्यन्तावनीविजयमड्नलका गार: परमभागवतो लयनमहाविष्णुगृहमतिद्वैमानुष्यकमत्यद्श्रक म्मे विरचितं भूमिभागोपभागोपरिपर्य्यन्तातिशयदर्शानीयतमं क्रत्वा तस्मिन् महाकार्तिकपौर्ण्णमास्यां ब्राह्मणेभ्यो महाप्रदानन्दत्वा भगवतः प्रल

# योदितार्क्कमण्डलाकारचक्कक्षपितामरारिपाक्षस्य विष्णो: प्रतिमा प्रतिष्ठाप नाभ्युदयनिमित्तं लञ्जीহवरत्नाम ग्रामन्नारायणबल्युपहारात्य्यं षोडरासंख्येक्यो ${ }^{1}$ 

The devclopment of this script during the next three centuries in the Câlukyan area is styled the middle variety by Bühler. This is exemplified by the earlier Cālukyan and Rästrakūta grants. The letters undergo further change and in a couple of centuries they are rounded $k a$ and $r a$ having thcir lower limbs cinsed to left. The loop of $y a$ develops into a full ovoid. The curved lower limb of $t a$ predominates over the dwindled upper limb. The tail end of $l a$ runs around the body with a flourish. The two curved limbs of bha seperate right from the serif. The limb to right of $g a$ and $\delta a$, rather than that to the left, curls inward terminally. The base of $p a, d a$, tha, $d h a, b a, m a, s a, c a, v a, h a, j a$ shows clear motch. The letters are squat and broad. An excellent example of these features in the Nilgued inscription of the Rāstrakūta king Amoghavarsa of the 9th century A.D. from which the following passage (Fig. 109) is chosen (Epigraph. Ind. VI, p. 98).

o.s. del.

Fig. 109

> जयति भुवनकारणं स्वयंभूर्जयति पुरन्दरनन्दनो मुरारिः जयतिगिरि सुतानिरुद्धदेहो दुरितभयापहरो हर२च देवः स वोव्याद्वेधसा धाम यन्ना भिकमलं कृतं हरइच यस्य कान्तेन्दुकलया कमलं कृतं लब्धप्रतिष्ठमचिराय

[^38]
## कलि सुदूरामुत्साय्य शुद्वचरितैंद्धरणीतलस्य कृत्वा पुनः कृतयुगश्रियम प्यशाषां चित्रं कथं निरुपम: कलिवल्लभोभूत् प्रभूतवर्षों गोविन्दराजागोर्य्यमु ${ }^{1}$

The next stage in the development as in the later Western Cälukyan inscriptions, is styled by Buhler the old Canarese type. The letters are definitely rounded specially $a$, $\$-k a, r a, g a, t a, t h a, d h a, b a$ and $l a$. In this stage of development the serif of any letter a small arch or cresent. The main limb of $a$ and $\bar{a}$ dominates as a circular flourish, se two dots of $i$ change into a loop connected with the right end of the main part above, che body of $k a$ is shaped like a circle surmounted by a dash supporting a crescent serif. The serif already noticeable for ga, th and cha develops individually for the first time, now being marked separately above. The right limb of gha diminishes in size and perches upward. In the case of $c a$, and $v a$ the left limb separates and the serif is retained towards the right. Cha develops a medial loop. The two upper horizontal strokes of $j a$ change into a curl to left and an upward are to right. T Ta develops an upward stroke. The central vertical stroke of $n a$ loses its individuality. $T a$ develops a marked loop to right below the serif. The shows a circlet in the belly. The base of $n a$ and $s a$ definitely moves separately towards the left. Ba opens at the top with a terminal curve to left, while the limbs of bia separate from beneath the serif, which is retained to the right. The slight opening of the belly of $m a$ to left, the peculiar prominent serif and right limb give a different shape to ma. The circle to the left of $y a$ is prominent. $L a$ is more or less a broad curl drawn with a flourish. $\delta a$ is a double looped curve with serif above. The right terminal of $h a$ is prominent. The following passage (Fig. 110) is from the Huli inscription of Vikramãditya VI (Ibid XVIII, p. 197).


FIG. 110.
C.S. ed.

[^39]> (@) नमस्तुंगशिरइन्चुंविचंद्रचामरचारवे ब्रैलोक्यनगरारंभमू लस्तंभाय शंभवे ।। वागर्थाविव संदृक्तौ वागर्थप्रतिपत्तये जगतः पितरौ बंदे पार्व्वतीपरमेइनरों। ओं नगः शिवा [य] (Q) स्वस्ति समस्तमुननाश्रयश्रीपृथ्वीबल्लभमहाराजाधिराज परमेइवरपरमभट्टारकसत्याश्रयकुलतिलक चालुक्या ${ }^{1}$

The latest phase of devclopment which leads on to the form of the litters as they are in modern Canarese is to be found in the latest Calukyan and Hoysala inscriptions. Here the letters are more rounded and specially in the Hoysala area the letters are as rounded and ornamented as the sculptures themselves. The features already observed in later Cālukyan script continue with greater emphasis. The medial $i, u, \bar{u}, r$ and other signs and subscripts $y a, r a$, etc., form fine flourishes and loops and sometimes there are decorative designs and floral patterns added terminally to the flourishes of the signs of the letters. The last stage is seen in Vijayanagara script which is the same for Canarese and Telugu. The modern Canarese script with the some peculiar differences from the Telugu script is after the Vijaysnagara period. So the parallel developments of Canarese and Telugu scripts in Western and Eastern areas of the Deccan are finally fused together in the Vijayanagara script, to later separate again in the form of two different scripts. The following passage chosen to illustrate the Hoysala script (Fig. 111) is from copper-plates from the Belur temple dated 1117 A.D. (Epigraph. Carn. V, P. 137).

fig. 111.
C.S. del.

[^40]> श्रीमत्रैलोक्यपूज्याय सक्षिकम्म्म
> सु साक्षिणे फलदाय नमो नित्यं
> केशावाय रिावाय च।। श्रीशोदरांबुजभ
> वादुदितोत्रिराश जातेन्दुप्रवुधपु
> त्रपुरूरवस्त : आयूस्ततश्श नहषो नहु
> षाद्ययाति : तस्माद्यदुर्य्यदुकुले
> बहृवो बभूबु : 11 स्यातेषु तेष
> नृपति : कथित : कदाचित् कश्रिदने मुनि
> बरेण शल : करालं शर्दूलकं प्र
> ति हि पोग्सल इल्यतोमूत्तस्थाभिषा
> मुनिवचोपिचमूरलक्ष्मं 11 ततो ${ }^{1}$

The development of the Telugu seript in South-Eastern Deccan and the coastal area should be studied along with that of the Canarese in the Western area. The Śalankāyana grants from the Krishna valley supply examples of the development of Brāhmi letters after the ornamental forms of the Ikģvāku and the earliest Pallava inscriptions. The Śälankāyana script is essentially the same as the earlier Brähmi, but there are no ornamental embellishments. The serif is clearly marked. The lower limb of $a$ and $\tilde{a}$ vaccilate between running with a flourish as a broad curve and forming an open narrow rectangle as in $r a$ and $t a$. The belly of $e$ projects too far out to left. The medial $i$ and $i$ are marked as a circle with open lower end on top of letter and similar circle with similar circlet inside respectively. There is no loop either for na for $t a$. There is a broad dash across the belly of tha. Ba occurs sometimes as a plain rectangle, sometimes with inward indentation to the left and sometimes slightly open at the point of indentation. Ya forms a small narrow loop to left. The

[^41]tail of la surrounds the body. The following passage (Fig. 112) is in Präkrt, as is usual in early inscriptions of the lind, and is from the plates of Vijayadevavarman (Epigraph. Ind. IX, p. 56).

Fig. 112.
coS. dd.

सिरिविजयवेड्झीपुरा भगवतो
(0) चित्तरथसामिपादानु

ज्झातस्स बप्पभठ्ठारकपादभत्तस्स
परममाहेस्सरस्स साल छ्कायनस्स
२ अस्समेघयाजिनो
महाराजा सिरिविजयदेववम्मस्स ${ }^{1}$

[^42]A further stage in the development of characters in the Telugu area may be seen in the $\mathbf{V}_{\text {igpukundin plates. Here } t a \text { shows a loop which is absent in na. The base of the left limb }}$ of $y a$ develops a notch and the letter shows the tendency to develop its future shape. Both the base and top line of $j a$ are notched and are so marked separately above andlbelow the middle stroke that the beginnings of the future shape of the letter may be seen here. The notch on the base of letters, like $p a, b a, d h a, v a, m a$ and $p a$ is pronounced. $L a$ is an open rectangle with terminals curved in at the top. $\lfloor a$ is shaped like da with a curve added terminally. The medial vowel signs are the same as the earlier ones. The following passage (Fig. 113) is from the Cikkulla plates of Vikramendravarman II (Ibid IV, P. 193).

fig. 113.
O.S. dol.

> (2) स्वस्ति विजयलेन्दुलूरवासकान्द्रगवत : श्रीपर्व्वत स्वामिपादानुध्यातो विष्णुकुण्डिनामेकादशाइवमेधावभ्रिता वर्धोतजगद्कल्मषस्य क्रतुसहस्र्रयाजिन सर्व्वमेधावाप्त सर्व्वभूतस्वाराज्यस्य बहसुवर्णपोण्डरीकपुरुषमेध ${ }^{1}$

The advent of the Eastern Cālukyes marks the beginning of Telugu literature, as the earliest Telugu records are of this period. The earliest literary works in Telugu, including the famous Bhärata or even Nannecoda's Kumärasambhava, are comparatively late producetions not to speak of Bhägatata of Potana, Śrinătha's Naisadha, or the still later works of the time of Krpnadevaräya. The earliest Telugu literature is from the inscriptions. The inscription recording the achievements of general Paṇdaranga is an example. The earliest script of the Eastern Callukyas, of the time of Kubjaviṣnuvarddhans, was no doubt akin to that of the Western Cąlukyan under Pulakeki, the brother of Vispuvardhana. But there is a later local development of the script, which however retains its essential affinities and relationship with the parent script derived from the Western area. The passage chosen

[^43](Fig. 114) here is from Viṣnuvardhana's Timmapuram grant (Ibid IX, p. 318). Note worthy features of the letters are I $k a$ and $r a$ are definitely shorter than previously, $k a$ showing a definite rectangle to the left below ; $t a$ tende to become a curve below the vertical stroke crowned with serif, a tendency which is more marked in its later development ; the right limb of $m a$ above the belly leans forward ; $y a$ develops a circle to the left ; $g a$ and sa develop a terminal inward curve to left ; a small stroke across the middle stroke of $j a$ determines the future form of the letter ; medial $i$ is indicated by curling the left end of the curl denoting short $i$.

\[

$$
\begin{aligned}
& \text { श्रोमत्पिष्टपुरावासकात्स्वभुजविजितदनुतनयमाहासेनेन माहा } \\
& \text { सेनेनाभिवर्द्वितानान्त्रिभुवनमातृभिम्मर्मभृभिरभिरक्षितानां मानव्यसगो } \\
& \text { ग्राणां हारितिपुत्राणां चक्यानामन्वयमुन्नमयितुमसकृदनुभू } \\
& \text { स्वस्ति तेरणरागस्य रणरागस्य नप्तासह्यविकमस्य रणविक्रम्य पौत्रो } \\
& \text { विपुलकीर्तो: कीर्तिवर्मण : प्रियसुत : शाक्तित्रयवशिकृत सकलमहीम } \\
& \text { ण्डलस्य सत्यश्रयवल्लभमहाराजस्य पियानुज : स्वासिधारनामितस }{ }^{1}
\end{aligned}
$$
\]

In a couple of centuries the letters undergo a change that marks the later script. The belly of $k a$ and $\tau a$ is definitely formed as an elongate rectangle with rounded corners. Kha with a large loop to left appears very like the modern letter. The left terminal inward curve of $g a$, and $\delta a$ is still present, though the separate serif with neek-like stroke below it distinguishes this along with other letters of this alphabet. Of the three distiuct strokes composing $j a$, the top and base are notehed, the former curling in terminally to left. Da, da, dha, per

[^44]and $\boldsymbol{h} \boldsymbol{a}$ closely resemble the later form in shape. Na develops loops to top left. Ta has a fine leftward enrve starting in a curl to right. The notch of the base of tha and dha is marked and there is a circlet in the belly of the former. $B a$ is open to left and is notehed at the top and base and terminally curves in at both ends. The two strokes composing lha sepnrate immediately beneath the serif, and $y a$ is nearly modern. La with diminutive body and large curve running around it is different from the earlier type and definitely modern. Sa has terminal curve to left and short neek for serif. The following passage (Fig. 115) is from the Masulipatam plates of Vijayãditya III (Ibid V, p. 122) and is a fine verse composed by one of the poets responsible for the composition of the Eastern C'alukyan plates.


राज : ॥ यस्मिन्नारूढदन्तिन्यरिकुलमधिसंरोहति क्ष्माभृदग्रं यद्वाहावात्त खद्ने रिपुयुवतिकरा गृह्नते चामराणि आबद्धायां भ्रकुटयां मधु रिपु भवने यस्य बध्नन्ति भृंगा यद्धामन्याजिभेरीध्वननमनु शिवाइशात्रु धाम्नि धवनन्ति ।। तस्य प्रियतनयः। कान्तेरिन्दुक्षमाया : क्षितिरमरत रुत्यागरा क्त
प्रतापस्यार्क्करशौर्य्यस्य सिंहों जलाधिरपि महासत्वतायामथायं स्थानं ${ }^{1}$
The development of this script in the tenth century is remarkable. The lettere are cast in a square mould with rounded corners and form a special type, easily distinguished from all earlier and later types by an individuality all their own. The serif in this script is somewhat thick and nail-like, while in the next century it is more or less V-shaped. The

[^45]lower $\operatorname{limb}$ of $a$ and $\boldsymbol{a}$ forms a broad rectangle with rounded corners, the left side of which reaches the serif. The body of $i$ above the dots forms two definite arches and is in a stage immediately proceding the formation in the next century of the type approaching the more modern. Medial $\tilde{a}$ is continued as a stroke in continuation of the serif to right, runs down and curves out slightly. Medial $i$ is a circle so flattened at the top as to look a half moon. A small hook added to it above the serif of the letter makes medial $i$. $U$ medial is shaped like a sickle. $E$ medial is a small diagonally drawn $Z$ above the letter. Ai medial has a downward stroke in addition to the e sign. A double arch above the letter denotes $o$ and aus, the arch being more emphasised in the latter. $K a$ and $r a$ have a definitely short rectangular belly. The serif of $g a$ and $\dot{a} a$ is prominent above the letter. The sides of $c a$ and bha start separately, though still touching the serif. $J a$ assumes the modern form with a loop to left and an arch to right top. Ta develope a long straight horn and na has loop to top left. The curl of $t a$ to left is more pronounced. $P a, p h a$ and $m a$ and $s a$ develop an apparent thickened end on the side lacking serif. Ba changes into its modern shape with open top and curl to left top. $Y a$ is peculiarly shaped, with the circle to left and limb to right, smaller and perched slightly higher, the base of the middle limb notched. The right end of $l a$ is thickened at the top. The following passage (Fig. 116) is from the Vandram plates of Ammarāja II (Ibid IX, p. 131).


FIG. 116
C.S. del.

## नुरागाय ॥ यस्मिन् सासति नृपतौ परिपवकानेकसस्यंस पच्छालि : सततपयोधेनुरभीर्नरीतिरपरुग्निस्तचोरो देशा : ॥ स सकलरिपुनृपतिमकुटतटर्धटितमणिगण



The emphasis on the serif in the script just considered becomes most prononnced in the 11th oentury letters of the Eastern Cälukyas. The serif is V-shaped and is nearly as big as the body of the letter itself. The first stage in the formation of the modern form of $a, \bar{a}$ and $i$ appears in this script, though it is a century later for $u$ as also for medial vowl signs. Ka and $r a$ are formed by a circle crowned by the $V$-shaped serif, but $k a$ has a horizontal stroke between the circle and the serif in addition. The serif is prominent in ga as in all wher letters but in the case of gha the right limb is slightly upward. In ca and bha, the two limhs separate beneath the serif which settles itself on top of the right limb and the top curve of the left limb is compressed by the squeezed form of the letter. The serif appears similarly in cha, The loop to top left of $j a$ opens a bit now and continues so later, and the tip of the eurve to right is not thickened serif-like, as in the previous century. The loop to top left of $n u$ opens out giving the letter the modern shape that continues thereafter. The curl of ta to right, above which the $V$-shaped serif is perohed, gives it an individuality. The bottom of tha and $d h a$ is broken at the point of the notch. The vertical stroke of $n a$ with serif above, glides softly to merge at its bottom in the right limb. The left end of pa beneath serif extends horizontally towards the vertical stroke, forming a box belly for the letter. A circlet separates the vertical stroke by its presence in the centre for pha. The loop to top left of $b a$ enlarges and opens a bit, as in $j a$, and the bottom breaks at the notch, as in dha and tha. $\boldsymbol{Y a}$ and $r a$ are more or less in the shape of the modern letter, except for the peculiar serif. fä

[^46]sheds the serif－like thick tip to right seen in the previous century．The following passage chosen（Fig．117）is from the Korumelli plates of Rājarăja I（Ind．Aut．XIV p．48）．

# 的和成只  

FIG． 117
C．S．det．

> (i) श्रीधाम्न : पुरुषोत्तमस्य महतो नारायणस्य प्रभोन्नाभीपंकरुहाब्दभू व जगतस्स्रण्ठा स्वयंभूस्तत जके मानससूनुरत्रिरिति य तस्मान्मनोरत्रितस्सोमो वंशकरस्सुधाशुरुदितश्रीकण्ठचूडामणि : । तस्मादासीत्सुधासूतेब्बुधो

बुधनुतस्त ${ }^{1}$

The best exaniple of proto－Telugu script is that of the time of the Käkatiyas．The script here is most graceful and the letters take their final shape，as from here onwards the shape of the letters undergoes but little change here and there；as for instance the small curve below for bha and pha appears a century or two later，and is substituted by a vertical stroke in Vijayanagara and later script．The Chebrolu inscription of Ja ya（Epigraph Ind．V， p．142）from which the following passage（Fig．118）is chosen is in very good preservation and presents an excellent example of the beautiful script of the Kākatiyas．In this the modern shape of $a$ and $\vec{a}$ appears with the body within the sweeping curve reduced to a horizontal stroke，ter minally curved to left in both with an additional outer curve in the case of $\vec{a}$ to right．$E$ assumes the modern shape with definite horn above and small horizontal stroke in the belly．From this time onwards the serif is a broader angle and less pronounced than in the 11 th century．Ca，$d a, l a, d h a, d a, p a, m a, l a, v a$ ，practically assume the modern form．Cha forms a small loop at its basal notch．The break in the base of tha and dha is discarded，though it continues for bha．The circlet breaking the right vertical stroke of pha is replaced by a small curved stroke，as in contemporary Hoysala script．Sa changes into a vertical stroke curved in towards the left terminally at both ends，as in slightly earlier Western Călukyan and contemporary Hoysala scripts．

[^47]



యృ












स्वस्तिश्री : । जयतिहरिवराह : प्रेमसं
भ्रांतपृथ्वीस्तन भरपरिरंभारंभ
दृप्तस्य यस्य। पुलकचुल़कितांभ :
स्संभवस्तोयराशि : पुनरविरलनि
र्य्यत्स्वेदपूरंरपूरि.। हेरंबस्य
विकल्पदंतमुकुल गौरीरहस्यो

# त्सवप्रत्यासंनविलासदीपकलिका <br> गंगामृणालांकुर : । देवस्य त्रिपुर <br> द्रुहो विजयिना षुष्पेषुणा मस्त <br> के विन्यस्तांकुराविभ्रमा विजयते <br> चूडासुधांशो : कला ।। पायाद्व : प <br> रिवर्तंमानलहरीप्राग्भारमास्फा <br> लयन्सायंकालतरंगकेलिषुकरास्क <br> दंने मंदाकिनीं। देवस्यारभटीपरिभ्र <br> मकलासंरंभसंभाविन : शांभोरंबु <br> मृदड्नवाद्यरचनारंभाय लंबोदर : $11^{1}$ 

The later development of this script is little, and, except for some minor changes the letters are practically the same as in Kākatilya inscriptions. Ta develops a tendency towards an occasional terminal curve to the left but this is more regular in the Vijayanagara script. Bha has occasionally a small curved stroke beneath it, which however becomes an invariable vertical stroke in the letter of the Vijayanagara script. The horizontal line, defining the upper contour of the belly of $s a$, is broken up to appear as a stroke against the right vertical; and this form continues thereafter. The following passage (Fig. 119) is from an inscriptipr of the time of Śrinātha, the famous Telugu poet, who is mentioned here as the Director of Public Instruction in the kingdom of Reddis. A portion of it is in Telugu though it runs some length in Sanskrit, the official language in India all over; and we can well imagine what a manuscript of the Śrngäranaişadha of Śrinātha would have been like by a look at the letters expressing the Telugu verses of the inscription. The inscription is from Phirangipuram in Guntur district (Ibid. XI p. 322).

[^48]

FIG． 119.

देवा मनुष्या ：पितरो गन्धर्वो
रगराक्षसा ：स्थावराणि च भूता
नि संश्रयन्ति जलाशयं। तटाके य
स्य गावस्तु पिबन्ति तृषिता जलं। मृ

# गपक्षिमनुष्यास्च सोश्वमेधफलं <br> लभेत्। आस्फोटयन्ति पितर : प्रनृत्य <br> ति पितामहा:। अपिन : स कुले जातो <br> यस्तट।कं करिष्यति।। विद्यातिकारी श्री <br> नाधो वीरश्रीवेमभूपते :। अकरोदा <br> करो वाचां निर्मलं धर्मशासनं।। श्री 



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\ురపుటంబులం బరిక్బూణమ
\mp@subsup{~}{~}{\}! రఘుకులోర్వాాధనుర్}\mp@subsup{\oint}{}{\circ
\ ము కुలైన प\ుృర ము्మల \
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పియూధనులచేతం Kట్టువ&'mె I
వనధియीళంగస8ివచ్సు ననంగవచ్సు
నారసాతల గంఖిరసారియగుచునవ
గङాపాయమగుکు ళోजాఢ్రవగ
చుననువమంZైన సంజానవనధిళోడ1
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The Vijayanagara monarchs ruled over the Canarese and Telugu areas; and the script used for their inscriptions both in Telugu and Canarese was the same. Special characteristics that distinguish the modern Canarese characters from Telugu appear later. In the development of the Telugu script from the early script the only noteworthy feature is the small

[^49]vertical stroke below aspirated letters, as in the case of bha, tha and dha, or, in the place of a small curved stroke, as in the case of pha. The letters are generally compressed and heightwise. The following passage (Fig. 120) is from the stone inscription in the Rangasvāmi temple at Hampi (S. Ind. Inscr. IV, p. 40).









PIG. 122.
C.S. del.


[^50]The earliest stages in the development of the Grantha-Tamil script show close affinition to the early Canarese-Telugu variety. The script of the time of Mahendravarman I and even Narasimhavarman I is closely akin to the early common variety all over South India and the Deocan. But from the end of the 7th century onwards an individuality is developed by Grantha-Tamil script which is continued with greater emphasis later. The psychological effect of the language for developing its own script may be noticed in the fact that the script and the development is almost the same in Coḷa, Päṇdya and Cera areas except that a modified cursive form of the script known as Vatteluttu occurs in the Southernmost Pāndya and Cera areas. The script, on the other hand, develops differently in the Telugu and the Canarese districts. The influence of Pallava script has been so great that its prototype is found in distant corners of South-Eastern Asia and the islands. The Pallava script of the early part of the 7th century A.D. is more or less akin to the earlier type but there are many varieties of it, all belonging to the same time, as Jouveau Dubreuil has ably demonstrated (Dubreuil, p. 39). There are the florid and simple varieties. The inscriptions of Mahendravarman in his cave temples and the different Birudas incised at Mahàbalipuram on the Dharmarajaratha and other monuments are examples. The four lines given below are expressed in four different varieties of the script, which is generally known as Pallava Grantha, as may be seen from the four types of $a$, two types of $m a$ and $y a$ and three types of $n a$ in the four lines. These (Fig. 121) are all from the Dharmarajaratha (Epigraph. lnd. X, p. I).


FIG. 121
O.8. sel-

## अमेयमाय : <br> अप्रतिहतरासन <br> अत्यन्तकाम । <br> अवनभाजन : 1

Of slightly later date, but showing definitely an advance towards the regular formation of the Grantha-Tamil variety, to which it belongs, is the line given below (Fig. 122). This script is quite similar to the example which is given next and is full of flourishes.


The following selection (Fig. 123) from the inscription of Rājasimha (i.e., Narasimhavarman II) in the Kailăsanātha temple at Kãñcīpuram (S. Ind. Inscr. I, p. 13) supplies an excellent example of typical Pallava Grantha of the end of the 7th century A.D. It also presents the noble type of verse in Sanskrit prepared about the time and which enrich Sanskrit literature in lithic records. In the case of, $a, \vec{a}$ and $i$, parallel vertical stroke to right characterises the letters in Grantha. The loop to left, afterwards characteristic of a and $\bar{a}$, starts now, as also the broad and sweeping curve to right lower end added to $\tilde{a}$. In the ease of $i$ in grantha, the usual notched horizontal stroke is ourved in to left and continued vertically down to right, the two dots being converted into circles. $U$ has hook-shaped head and diagonal body line. $E$ develops a loop and breaks considerably from the parent type. Medial $\bar{a}$ is a small zigzag stroke over a crescent added near the serif of a letter. Medial $i$, $\boldsymbol{i}, u, u$ are more or less ornamental developments with flourishes of 5 th century Pallava medial signs. $E$ and ai medial are a single and double curl, the latter, one below another, to the left of a letter. $O$ medial is a combination of $e$ and $\bar{a}$ medial signs to the left and right top of a letter. $K a$ and $r a$ are characterised by parellel vertical stroke, the former with a cross stroke curled down at both ends in addition. A prominent curl to left and looped body represent $k h a$. $G a$ and $\delta a$ retain the old form but slowly an outer curve is added to leff,

[^51]and $s a$ and the and $s a$ substitute the central stroke and dot by a cure inside to the right. ga develops zigzag contour that charges its form. Ta lends to run diagonally. $N a$ slowly spreads itself like a pulled wire coil. That and doa open to right top, where the side is straightened somewhat. The curved limb moving away from the vertical stroke of na is to the right, not left, as usual. Bia at first is strangely shaped like a triskele, but is later somewhat like the Nagari letter of the time. $Y a$ develops a narrow loop to left. $L a$ is at first angular, after the earlier model, but later becomes more or less like the Cālukyan letter, a broad flourish encircling the small body stroke.


FIG. 123
C.S. del.

अस्मिन्नुत्वृत्तरात्रुद्विरदघनघटारार्जसिंहेन राज्ञा राज्ञामाज्ञाविधेयीकृत सकलदिशानिर्म्मिते धर्मभाजा शौले कैलासलीलामपहरति गृहे रार्जसंहेरवरास्यां विभ्रत्यभ्रंलिह्हाग्र विरचयतु सदा सुन्निधानं वृषाङ्\%:॥ कलाचतुरयोषितां रहसि रञ्जने मन्मथस्त्रयीपथनिषेविगां सततपालने वासव : Il मुनिद्विजसुरद्विषां हृदयदारणें माधव : सच द्रविणसंपदा सुजनतोषणे वित्तद : $11^{1}$

[^52]

The Kūram grant of Parameśv ravarman I (Fig. 124) shows the normal variety of Gran tha script about the end of the 7th century A.D. from which later development can be studied. This inscription is also most valuable, as it supplies the earliest Tamil characters developed after the age when Brahmi itself was used for inscription in Tamil. The development of Grantha and Tamil is observed at once in this grant, as it is partly in Sanskrit and partly in Tamil. The development of Grantha illustrated in the passage given below (S. Ind. Inscr. I p. 148). $A$ and $\bar{a}$ show the loop to left. $E$ is drawn like $Z$ with its tail end drawn out in a loop and curve above in continuation. I has only a single large circlet to left, $K h a$ is shaped like a clumsy. Arabic 2 only with looped belly. The tail end of Fa is looped and continued in a curve above it. $T a$ is as usual C-shaped, but with a stroke below. Ṇa is a drawn out coil. Ta has a prominent loop which na lacks and the curved limb of na usually to left is here to right. The base and top of $b a$ are connected by diagonal stroke. $L a$ is composed of a small double curve, encircled by its own tail as a broad flourish. Va is pear-shaped with serif above. Ś $a$ has an almost parallel outer curve to left and an inward terminal curve to right. $a$ is more or less like $p a$ with terminal loop to right. Sa is more or less after the Nägari pattern. Of the medial vowel signs $u$ and $\bar{u}$ are rather exaggerated. La here, as in Canarese-Telugu charters, is written vertically in zig-zag course. परमेशवर इव सर्व्वाधिकदर्शान परमेशवरवर्म्मा भरत इव सर्व्वदमन सगर इव कृता समञ्जसत्याग: कर्ण इव पुष्कलांग ोय: प्रियकव्यो ययातिरिव अनुपनतानां राज्ञा यस्याज्ञा भवति सर्व्वदा पीला सैव सुहृदाम्प्रयच्छति मुखशोभा कर्णपूरतया चतुरः कला विलासे नियतम् यश्वांदो भवत्यनंगस्य मुक्तागुणस्तु हृदये मुक्तागण एव वनितानाम् अगणितनरहयकरिकुलबिमर्द्ज्जनितेन रेणुतुहिनेन आरोपितश शिमण्डलसादृइयसहस्रकरबिम्बे पटहरवर्गज्जितोग्रे विकोशानिस्तिशानवि युदाभोगे प्रचरितकुञ्जरजलदे विकालवर्षावतार इव तुंगतुरंगतरंगे प्रच ${ }^{1}$

The script in the 8th century shows no doubt some development but in the main the features of the letters of the prevoius century continue. Noteworthy changes are the diagonal stroke for Grantha $i$, as the case of $b a$. The right side of $g a, t h a, d h a, p a, n a, b a, y a, s a$

[^53]$s a$ and $s a$ is a straight vertical stoke. The last mentioned letter develops a rectangular box at the left top against the diagonal stroke. The small nail-head shaped serif, noticed in the florid script in the Kailāsanätha inscription still continues in this century. The letters are neatly drawn, keeping angularities to right and curves to left as far as possbile. The following passage is (Fig. 125) from the Kasākuḍi plates of Nandivarman (Ibid. II, p. 346).


The stages of the development of pure Tamil script are lost in obscurity for nearly nine or ten centuries, as after the early cave inscriptions of about the 3rd century B.C. in the Southern districts of the Tamil area, Tamil inscriptions of some length occur only in the 7th century A.D. The Kūram plates of the 7th century A.D. show the letters

[^54]then in vogue, Tamil letters were used for expressing everything in that language, as the attenuated number of letters composing that alphabet, with the addition of a few more (already present even in the earliest stage of the script in the cave inscriptions) was sufficient in accordance with the genius of the language ; and all deficiencies, such as the aspirated letters, additional siblilants, etc., for expressing Sanskrit terms, were made up by the use of Granth characters, closely akin to Tamil but with certain additional features, even in the case of letters existing in Tamil, like $a, \bar{a}, i, e, k a, c a, p a, m a, r a, l a$ and $v a$, at a later stage. The following extract in Tamil (Fig. 126) is late Pallava, when the form of the Tamil script is well on the way to the settled form of the early Cola letters. It is from the Tiruvellarai inscription of the time of Dantivarman (Epigraph Ind. XI, p. 154). The passage in beautiful Tamil verse is typical of gnomic poetry, but the exact source of this is not known. The Pallava monarchs were great patrons of Tamil literture, along with Sanskirt, like their political successors, the Colas and the Pāndyas, and the passage given below is a noteworthy one from the literary point of view as well. Tamil letters, it should be noted, are definitely simpler and less cumbrous than Grantha. $A, \bar{a} k a$ and ra lack the double vertical stroke. $I$ is like the Arabic numeral 3. $E$ is a simple curve looped to left top. $C a$ is at first a vertical stroke with elongate loop to left which opens later. Ta lacks the hook at the base in Grantha. $M a$ is a looped version of $p a, L a$ is like reversed $S$ laid flat. The later medial $u$ is a bit elaborate.




He. 126.
C.S. del.





An illustration of the verisimilitude of Grantha script in the Panḍya kingdom with that of the Pallava and Cola kingdoms further north, all in the Tamil area, is given in the passage below (Ibid VIII, p. 320). The letters are typical of Tamilnäd in the 8th century A.D. Grantha letters occurring with Vatteluttu (Fig. 127), or by themselves, in pure Sanskrit texts, as in this passage, are the same, though Vatteluttu, which more or less displaced Tamil scripts in the more Southern districts, is a cursory form which in many respects differs from, though based on, Tamil scripts.

pIG. 127.
C. S. del.

[^55]> करवन्दपुरनिवासि श्रीमान्वैद्य: शिला
> गृहं विष्णो: अकृत कृति मधुरकविर्म्म धुरतरो माग्सूनुरिदम्॥ मन्त्रि स ए व मतिमान्पण्डयस्य परान्तकाभिधान स्य अमिर्ताद्धमग्रेजेभ्यः प्रादादिम ${ }^{1}$

The slight development of Grantha-Tamil from late Pallava to early Cola with the main features still intact, is indicated in the example chosen below from the Madras Museum plates of Uttama Cola (S. Ind. Inscr. III, p. 264). In Grantha script the noteworthy changes from that of the 8th century given above (Fig. 128) are that the angularities to the right get rounded in general for all letters. Kha has an enlarged nose, the right limb of $g a$ is enlarged and bent angularly, $t a$ becomes angular still with base diagonal, na develops loop, tha, $d$ ha, $b a$ open wider to the top like $v a$, the open top of $m a$ closes and forms a small loop, and the box-shaped left limb of sa opens. Both Grantha and Tamil passages occur in the passage chosen for illustration below. There is no great change noticeable in Tamil script here from that of late Pallava given above (Fig. 126). It may be noted that $a$ and $\tilde{a}$ lack the loop which was present in early Pallava script and which was already lost in the late Pallava letters; va opens wider to the top and the base of $p a$ and $m a$ become more horizontal. Like the soulptures of this transitional period of late Pallava and Cola periods, the script of the time is most beautiful and elegant and is in keeping with the high standard of artistic perfection.


FIG. 128.
C.S. del.

[^56]
# देयं राजभाब्यं करमितिमधुरोन्माधिना शून्यभावाच्चोलेनाज्ञापितै स्तंरथ नगरजनंरप्यनुज्ञातमेतम्।। आयव्ययावथालिस्य चोलानियमबा सिभि: मासक्रमेण चैकैक्कन्दर्शंनीयो कुडुम्बिभिः राजवस्तकृतामेषान्चतु  

  

The development of Grantha and Tamil script in the next century in Cola grants is illustrated Rājendra Colaa's Tiruvālangăḍu plates (Ibid, p. 383). The passage given below (Fig. 129) is from the Sanskrit portion to show Grantha script. The Tiruvãlangaḍu plates are the most unique in Indian epigraphy. They are thirty-one large copper sheets strung on a huge ring with a massive seal. No doubt Cola grants are large and heavy, as for instance, the larger Leyden plates, but the Tiruvālangāḍu plates weigh eight maunds, two visses and twenty palams, being ' nearly three times as heavy as the Paithan records of A.D. 1272 pronounced by Fleet to be an epigraphic curiosity in respect of its weight' (Ibid, p. 383). In this script, the serif of the letters undergoes a change in that it overhangs to left eves-like, and the letters are not so very regular and neat, as in Uttama Cola's inscription above. As in the case of $g a, d a$ has also the right arm somewhat enlarged and bent angularly. The remarks about $k h a, f a, t h a, d h a, b h a$, and $s a$ in the previous passage also apply here.

fig. 129.
C.S. del.

[^57]> स्वस्ति श्रीकण्ठकण्ठाभरणभुजगराटर्धूध्न माणिक्चमध्ये टृष्ट्वव त्मीयां सलज्जा प्रतिकृतियपरामंगनां शंकमाना अइलेषालो लचित्तं कृतचरणनतित्रार्थनम् वो भवानी दिशयात् पश्यन्त्यधी रान्निजपतिमनिरां सेर्ष्यमर्धेक्षणेना।। वीरश्रीरांजहंसीविह णसरसी विद्वदम्भोजभानुदृँष्टाट्टष्टार्त्थमार्गंद्वयपथिकम हालोकसार्थोकनाथः सर्व्वक्षत्राधिनाथस्सकलगुण मणिश्रेणिजन्माम्बुरांशिाविशवक्लेशापहारी चिरम वतु महीमण्डलञ्चोलवंशः।। पञ्चाशदेव लिपय: $\square^{1}$

The corresponding Tamil script is represented by the following passage from one of Rājendra Cola's inscriptions in the Brphadisvara temple at Tanjore (Ibid II, p. 105,). The Meykirti given here (Fig. 130) is typical of all Tamil inscriptions. The dignity of the Tamil language has never been undermined by the kings of the Tamil kingdom and along with Sanskrit, the official language, the local language, Tamil, has been freely used. The language is elegant and the Meykirtis if the Colas and Pänḍyas are contributions to Tamil literature. The Meykirtis differ from king to king and help us to understand the king and his exploits. These exploits increase and swell the Meykirti which even in the case of the same king differs in length as years advance as in those of Rājarāja and Rājendra. Pa and $m a$ among the letters have a base line which is more or less horizontal. In the case of all letters, the serif undergoes the change in form as in Grantha.


FIG. 130.
C. S. del.
${ }^{1}$ May Bhavảnt (Parvati) grant you prosperity, who seeing a reflection of herself in the gem on the head of






A further stage of development is reached in the later Cola inscriptions and the beginrings are already seen in the records of Rājendra Cola Kulottunga who combined the Cola and Catlukyan sovereignties in the third quarter of the 11th century. The following passage (Fig. 131) is from a late inscription of his at Tirukalukkunram, dated in the beginning of the 12 th century A.D. (Ibid III, p. 164). The letters tend to become more angular and the general mould is rectangular. There is no letter that has not a clear horizontal base, including even $u$ and $\ddagger a$. In $i$ the tail tends to encircle its body. $Y a$ is more or less like $\mathbf{E}$ laid on its back. The overhanging serif becomes more marked.

#     

FIG. 131.
C.S. de?.

[^58]${ }^{\text {t }}$ Hail ! Prosperity ! while his wheel (of authority) went as far as the golden circle (Mount Merry) on the earth surrot ndec by the most of the which was surrounded by (his) fame (the king) newly wedded the brilliant geddess of victory, while still heir apparent, by deed of valour at Sakkarakotttam.

The final stage of Grantha-Tamil script is reached in theVijayanagara inscriptions where the letters are cast in angular moulds, with the type so settled that there is no further appreciable difference between this and the modern type. In Grantha the double verticals of $a, \bar{a}, k a$ and $r a$ form a rectangle heightwise with the base line somewhat extended to left. As the base of all letters is uniformly horizontal, the diagonal base of $i$ is suitably changed. The curve, indicating the lengthening of $\bar{a}$ partly encircles the main body of the letter. $T a$ deteriorates into a zigzag. The nose of $k h a, d a, d a$, and $p a$ is enlarged and in the case of the first it hangs down somewhat; in addition the nose has a tendency to curl in kha,gha, $\downarrow a, d a, p a p h a, b a, v a, s a, s a$, and $h a$. In $m a$ the small top loop opens and appears. as a curl. The earlier undulating contour of the small body of la, encircled by its own tail, changes into regular double curve. The central stroke of ya slants to right. In Tamil, the nose of $a, \vec{a}$, and $e$ is enlarged and tends to curl. In the case of $k a, c a$ and $t a$ the earlier overhanging serif settles as a rectangle over the body loop. Ta is a regular right angle and $p a$ a rectangle with open top. The following passage (Fig. 132) is from the Madras Museum plates of Srigiribhūpāla (Epigraph. Ind. VIII, p. 309) : -


FIG. 132.
2. S. de/.

लक्ष्मीम् पक्ष्मलयत्वाद्यमन्त
रायतमोपहम। प्रथमद्वन्द्व
सम्भूतम् प्रणयाद्वैतबै
भवम् करुणामयवामांगं क
ल्याणगुणभूषणम्। वन्दे चन्द्र
कलाकल्पम्महस्त्रित यलोच्नम

## भुव: प्रेमपरिष्वंगपुलकांकि <br> तबाहवे। नमो वराहवपु <br> षे श्रीवैभवपुषे त्विषे। व <br> न्देनन्तफणाभूषां स्यन्दन <br> म्मेरुधन्वनः। मेदिनीं हरिदोस्तम् <br> भमेघनादानुलासिनीम्। आ <br> सीत् सोमान्वये रम्ये यदु: पर <br> मघर्ामकः । अंशावतीर्णो यद्वं <br> शो भगवान् पद्यलोचनः। त <br> त्कुले संगमो राजा समभूत् ${ }^{1}$

As Grantha and Tamil were used together the former for expressing Sanskrit passages and Sanskrit terms occurring in Tamil inscription, so Grantha and Vatteluttu were used in the extreme south of the Peninsula. Vetteluttu is a form of cursory Tamil written in a feculiar slanting way, and as it had an independent development, the letters differ to a certain extent in their general features with greater resemblance in such letters as $\tilde{a}, \tilde{a} u, \varepsilon$, $k a, p a, r a, l a$ and $v a$, but less of it in letters like $t a$ and $m a$, and in some cases by their peculiarly different shape as for instance in $i, n a, t a, n a$ and $y a$, though the ultimate common orign can easily be traced. Pāṇḍya Cera and some Cola inscriptions are engraved in this

[^59]script, and the passage chosen (Fig. 133) is from Pāndya Parantakas' inscription of the 8th century A.D. (Ibid VIII, p. 320). It is interesting that all medial vowel signs are added before and after in the same line and not above or below in Vãtfeluttu. In early Vatfeluttu letters as given here are nearer to Tamil letters than the later ones.


以 or 3 कि $\gamma$ GL $3 x 2$






maun aver Pu Noil
 vo Pervangor
บ य स ख बC 2 कु $\gamma$

me. 133.
-. 8 del.














[^60]APPENDIX.

## INSCRIPTIONS IN THE EPIGRAPHICAL BAYS OF THE ARCHAOLOGICAL SECTION OF THE MADRAS GOVERNMENT MUSEUM.

The collection of copper-plates and inscribed slabs in the Madras Museum is probably the richest in India. The need for exhibiting in a worthy manner typical inscriptions of various dates and scripts occurring in South India was keenly felt and the result is the epigraphical bays in the mezannine floor of the new Archaeological extension. Here the scheme of arrangement is to show the development of Brähmi from the earliest times to the 4th century A.1) in one bay, that of Tamil Grantha from the earliest times to the latest phase in the next, that of Canarese Telugu in the bay beyond it and in the last the development of Nigar. In addition to the actual inscriptions and some plaster casts, originals of which could not lie oltained or exhibited with safety, there is a chart given in each bay to show the various stages in the development of the script. A general label explains the development of scripts as such in India with special reference to the South Indian variety, and in each bay the history of the particular script is stressed, individual labels beneath each exhibit explathing its significance.

The huge collection, comprising mostly copper-plate grants, is partly classified, eatalogied and arranged according to dynasties and kept in the reserve colleetion, along with sulsequent additions, which have been entered and described in accession registers, but which await classification and cataloguing with adequate descriptions. Many of the large collection of inscribed stone slabs are arranged in the shed and form a rich and valuable reserve cullection, while a selection from these is exhibited in the bays of the epigraphical gilley.

In the Brāhmi bay the first exhibit is a cast of an Asokan edict from Jaugada, showing the letters in the time of the great Mauryan emperor ( $\mathrm{pl} . \mathrm{V}-a$ ). The next is a cast from one of the inscribed Bhattiprolu reliquary lids. The original itself is exhibited in the Buddhist gallery and one interested in the original can well have a look at it there (pl. V-b, c). The peculiar features of the Bhattiprolu script deserve special attention and the importance of this exhibit is obvious. The next is an original slab from Amarâvati, an upright from the rail giving the name of a guild from Dhãnyakataka, modern Amarāvati, inscribed inletters of the 2nd century B.C. (pl. VI-a). A further stage of devclopment of Brāhmí is illustrated by an inscription composed of beautiful elongate letters, also from Amāravati (pl. VI-b). All the best specimens of this eloborate ornamental lettering come from Jaggayyapeta and Nägärjunakonḍa, an inseribed slab from Jaggayyapeṭa is given next (pl. VI-c). The final development of Brāhmi script, before it changes into the type which is the parent of the Telugu-Canarese and Tamil-Grantha, is shown by a cast of the first plate from a grant of Pallava Sivaskandavarman issued from Kã̃̃ci. The chart which comes next shows the various stages of the development in greater detail.

In the next, the Tamil-Grantha bay, the first exhibit is another cast of the Asokan edict. The next is a small fragment of an inscription from Amarāvati of the 2nd century A.D., showing the development of Brāhmi five centuries later. The development of Brāhmi having been more elaborately dealt with in the previous bay, the development of Tamil Grantha script from Brāhmí is dealt with in greater detail here. Seventh century Grantha script, as it occurs in the inscriptions of Rãjasimhe at the Kailãsanãtha temple in Kãñchipuram, is illustrated by a small fragment from Käñchīpuram (pl. VII-a). Further development during the time of Nandivarman Pallavamalla of later Pallava palaeography is shown next by a small slab kindly presented to the Museum by my friend Mr. M. K. Srinivasa Mudaliar, Zamindar of Manali. The development of this script both in Grantha and in Tamil is beautifully illustrated in the stone inscription of Rājarāja from Kalambākkam, Chingleput district, which is in excellent state of preservation (pl. VIII).* The final phase of development of Tamil-Grantha is illustrated by a cast of a Vijayanagar iuscription which shows the script not very different from that of today. The chart which comes next contains, as in the Brähmi bay, a more detailed study of this development.

In the Canarese-Telugu bay which comes next, the first two exhibits are the casts of the Asokan inscription and a fragment of an inscription from Amarāvati in the same order as in the previous bay, as the early development of the script is the same in both the areas where these two types of scripts develop later. The inscribed slabs are arranged in two rows one above and the other below to show the simultaneous development of the script in the eastern or Telugu area and the western or the Canarese area. For showing the development of the script in the Telugu region, an early inscribed slab with no particular date but which can be assigned to the early years of the Eastern Calaukyan dynasty is shown. $\dagger$ The next is an inscribed slab from Addanki of the 9th century (pl. X-a). This is an important one from the point of view of both palaeography and literature. This inscription is clear proof of Telugu poetry of the 9 th century A.D., though unfortunately no literary work of a date earlier than the Mahäbhärata of Nannaya Bhatta, the poet laureate of the Eastern Cälukyan king Rājarāja of the 11th century A.D., except Nannecoḍa's Kumãrasambhava of the 10th century A.D., has yet been discovered. The beginnings of Telugu poetry are to be sought in the inscriptions, and the Addanki stone inscription being earlier than the Bezwada pillar inscription of Yuddhamalla, which itself is a century earlier than Nannaya, is specially noteworthy. Paṇdaranga, who is mentioned in this inscription, was the minister of Gunagavijayäditya III. The next inscribed slab is of the 11th century and shows the type of letters used during Rājarāja's time (pl. X-b). After this comes a cast showing the development of Telugu during the early years of Vijayanagara rule in the 14th century (pl. X-c).

The development in the Canarese districts is illustrated by a carved slab showing a warrior in a panel with inscriptions on the border to the sides and top. The inscription,

[^61]which is partly mutilated, is of the time of Vikramāditya, the Western Cālukyan king of the Bādāmi line (pl. XI-a). This is probably the only Western Cālukyan inscription of an early date on stone found in the Madras Province. The next is a cast of a portion of a Rāşrakūta inscription from a bathing pedestal from Dānavulapāḍu of the 10 th century . A.D. The next is a large inscription of the later Western Cälukyan king Vikramãditya VI (pl. XI-b). The final development in both areas being the same in the Vijayanagara period, the same cast of the inscription of the Vijayanagara period serves the purpose for the script development in the Canarese area as well. Beyond this, there is a chart showing the development of both Canarese and Telugu from Brāhmiduring the centuries.

In the Nägari bay, after the Asokan cast, there is space allotted for a cast of a Kuşaña inscription to be acquired from the Indian Museum, Calcutta. The next stage of development is illustrated by a cast of the Eran inscription of Samudragupta. Coming from Central India, it exhibits certain special features in the letters, namely, the box-head and the nailhead. The next is an original slab with an inscription in Nägari of the 7th century A.D., exactly as it occurs in the Kailāsanātha temple (pl. XII-a). This Pallava inscription should be assigned to the time of Parame svaravarman, for, though most of it is obliterated, I have been able to read a line or two which follow the Küram grant of Paramesvaravarman.. The next is an original slab from near Mukhalingam of the time of Anantavarma Codagariga (pl. XII-b). This shows the type of Nägarí prevalent in the Kalinga area in the 11th century A.D., and the Pallava slab shows letters with features similar to the Nägari type prevalent in North India at the time. The final stage of development of Năgari in South India as seen in thee Nandinägari inscriptions of the Vijayanagara monarchs is illustrated by a cast of a eopper plate (pl. XII-c). Beyond this, there is a chart illustrating the development of she script.

## BIBLIOGRAPHY.

Abhijñ̄ānaśakuntalam .. By Kālidāsa (Vani Vilas Press, Srirangam), pages 1-332.
Annual Reports of South Indian Epigraphy, Madras (1887-1940).
Bhajagovinda Stotra .. By Śankarācārya in the memorial edition of the complete work of Śankarācārya (Vani Vilas Press, Srirangam).
BÜHLER, G. ... ... Indischen Palaeographie, Grundriss der Indo-Arischen Philologie und alterlumskunde with 17 plates (Strassburg 1896). Translated by Fleet in Supplement to Indian Antiquary, XXXIII (Bombay, 1904), pages 1-102.
Burgess, J. ... .- The Buddhist Stupas of Amaravati and Jaggayyapeta,Archaeological Survey S. Ind. 1 (London, 1887), pages 1-131, plates 1-69 and 32 wood-cuts.
Burnell, A. C... $\rightarrow$ Element - of South Indian Palæography (London, 1878), pages 1-147, plates 1-34.
Chhabra, B. Ch. ... Expansion of Indo-Aryan Culture during Pallava rule as evidenced by inscriptions. Journ. Asiatic Soc., Bengal. Lett: I (Calcutta, 1935), pages 1-64, plates 1-7.
Coedes, G. .. ... Le Royaume de Crivijaya, Bulletin de l'Ecole Francaise d'extreme-Orient (Hanoi). Volume XVIII, No. 6 and pages 1-36.
Coomaraswamy, A. K. .. History of Indian and Indonesian Art (London, 1927), pages 1-195, plates 1-128.
Cunningham, A. .. ... (1) Stupa of Bharhut (London, 1879), pages 1-143, plates 1-57.
(2) Archaeological Survey of India Reports, Volume X (Calcutta, 1880), pages 1-132, plates 1-36.
(3) Archaeological Survey of India Reports, Volume XVII (Calcutta, 1884), pages 1-169, plates 1-34.
Daśakuınäracarita .. By Daṇ̣̣in with the commentaries Padadipikâ, Padacandrika Bhūşaṇa and Laghudīpikã (Nirnayasagara Press, Bombay, 1917), pages 1-284.

Davids Reys, T. W. ... Buddhist India, Story of the Nations Series (London, 1903), pages 1-332, 57 figures.

| Elinot, Sir Walter | Coins of Southern India, The International Numismata Orientalia, III, Part 2 (London, 1886), pages 1-158, plates 1-4 and map. |
| :---: | :---: |
| Epigraphia Birmanica | Volumes I and IV (Rangoon, 1919-1921). |
| Epigraphia Carnatica | Volumes IV and V, Mysove Archaeological Series (Bangalore, 1898, Mangalore, 1902). |
| Epigraphia Indica | Volumes I to XXV records of the Archæological Survey of India and figures (Calcutta, 1892-1942). |
| Epigraphia Zeylanica | Volumes I to III, Archaeological Survey of Ceylon (Oxford, 1904-1932). |
| Fleet, J. F. | - Gupta Inscriptions, Corpus Inscriptionum Indicarum, III (Calcutta, 1888), pages 1-350, plates 1-95. |
| Fraske, A. H. .. | The Tibetan Alphabet, Epigraphia Indica XI (Calcutta, 1912), pages 266-272, plates 1-7. |
| Gopinatha Rao, T. A. | .. (1) Some Cola inscriptions, with a chapter on the evolution of the Tamil Grantha alphabet, Travancore Archaeological Series I (Madras 1910-13), pages 201-250, and plates. |
|  | (2) Specimens of Vatteluttu inscriptions, Travancore Archaeological Series I (Madras, 1910-13), pages 283-303 and plates. |
| Grierson, Sir G. A. | Linguistic Survey of India, Volume I (Calcutta, 1927), pages 1-517, maps 5. |
| Harsacarita.. | .- By Bãna with the commentary of Śankara (Nirnayasagara Press, Bombay, 1918), pages 1-158; Translated by E. B. Cowell and F. W. Thomas (London, 1897), pages 1-284. |
| Hoernle, A. F. R. | ... Manuscript remains of Buddhist Literature found in Eastern Turkestan, Volume I, pages, 1-412, plates 22, Volume II, plates (Oxford, 1916). |
| Hultzsch, E. .- | - Asokan Inscriptions, Corpus Inscriplionum Indicarum I (Oxford, 1925), pages 1-131, 1-260, plates 55. |
| Hunter, G. R. - | - Unknown pictographic seript near Ramtek, C. P., Journ. Bihar and Orisea Res. Soc. XX (Patna, 1934), pages 10-12. |
| Indian Antiguary .. | - Volumes I to LX (Bombay, 1872-1931). |


| Jataka .. | . Six volumes with Index volume, edited by Fausboll and translated by E. B. Cowell and others (Cambridge, 1895-1913). |
| :---: | :---: |
| Jouveau-Dubreuil, | Pallava Antiquities, I (London, 1916), pages 1-76, plates 1-32. |
| Kädambari $\quad$.. | .. By Bāṇa with the commentaries of Bhānucandra and Siddhacandra (Niranayasagara Press, Bombay, 1912), pages 1-609. |
| Kävyãdarśa | - By Daṇ̣in, Government Oriental Series (Poona, 1938), pages 1-432. |
| Kern, H. .- - | ... (1) Verspreide Geschriften, Volume I, pages 55-76. <br> (2) Verspreide Geschriften, Volume III, pages 255 ff . <br> (3) Verspreide Geschriften, Volume VII, pages 201 ff. |
| Kumärasambhava .. | By Kālidāsa with the commentary of Mallinātha (Nirnayasagara Press, Bombay, 1919), pages 1-323. |
| Lakshmana Rao, K. <br> M. Somasekhara | d See under Sarma, M. S. |
| Laļitavistara | Edited by Dr. S. Lefmamu (Halle, 1902), pages 1-448. |
| Longhurst, A. H. | .. The Buddhist Antiquities of Nagarjunakonda, Memoirs, Archaeological Survey of India, No. 54 (Delhi, 1938), pages 1-67, plates 1-50. |
| Luders, H. . | ..- A list of Brahmi Inscriptions from the earliest times to about A.D. 400, Epigraphia Indica, X (Calcutta, 1912), pages 1-126. |
| Majumdar, R. C. | - (1) Ancient Indian Colonies in the Far East, Volume I, Champa (Lahore, 1927), Parts I and II, pages 1-274 and Part III, pages 1-227, Plates 21. Volume II, Suvarnadvipa (Dacca, 1937, 1938), Part I, pages 1-436, Part II, pages 1-354, plate 75. <br> (2) La paleographie des inscriptions du Champa, Bulletin de l'Ecole Francaise d'Extreme-Orient, XXXII (Hanoi, 1932), pages 127-139, Plate I. |
| Mâlavikãgnimitra - | - By Kälidāsa with the commentary of Kátayavema (Nirnayasagara Press, Bombay, 1918), pages 1-109. |




Smith, V. A. .. ... Catalogue of Coins in the Indian Museum, Calcutta, including the cabinet of the Asiatic Society of Bengal, Vol. I (Oxford, 1906), pages 1-346, plates 1-31.

South Indian Inscriptions. Volumes I to IV, Archaeological Survey of India. New Imperial Series (Madras, 1590-1924).

Srinivasaraghava ... Catalogue of Copper-plate grants in the Government Museum, ayyangar, R. Madras (Madras, 1918), pagen 1-59.

Subrahmanya Aiyar, K.V. (1) Historical Sketches of Aicient Deccan (Madras, 1917), pages 1-429.
(2) The Pāndya Country and the inscriptions, Procetdings and Transactions of the Third Oriental Conference, 1924.

Subrahmanyam, T. N. .. Paṇdai Tamil Eluatukkal (Early Tamil Scripts) in Tamil (Madras Law Journal Press, Mylapore, 1938), pages 1-112, plates 1-7 and figures.

Sûryááataka - - By Mayũra, Kãvyamãlā series, Part IV (Bombay, 18s7), pages 1-33 andin Poems of Mayūra, edited by G.P. Quakenbos, Indo-Iranian Series, Volume IX (New York, 1917), pages 1-362.

Travancore Archaeological Series I (Madras, 1910-13), pages 1-303, plates 1-48.

Venkayya, V. - - Irrigation in Southern India in Ancient Times, Annual Report of the Director-General of A chaeological Survey of India for 1903-04 (Calcutta, 1906), pages 202-211.

Voari, J. PH. - .. (1) The Yupa Inscriptions of King Mulavarman from Koetai (East Borneo)-Bijdragen tot de Taal, Land-en Volkenkunde van Netherlandsch-Indie, Uitgegeven door het Kon. Instituut voor de Taal, Land-on Volkenkunde van Nether-landsch-Indie, Volume 74 (1918), pages 167-232.
(2) The earliest Sanskrit inscriptions of Java, Publicaties van den Oudheidkundigen Dienst in Netherlandsch-Indies, Deel I (1925), pages 15-35.

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(a)

(b)

## Plate III

(a) The Cikkutlo plates of Visnwkundi Vikramendravarman II.
(b) Seal of the Ciksulla plates.
(c) Seal of an Eastern Culukyan copper plate grant.
hULL., MADRAS GUV'T, MUS. (N.S.) G.S.
PLATE H:

(a)

(b)


## Plate IV

(a), (b) Coppor plate grant of the Eastera Ciljakyan King Vijayiditya Iff from Sitalice Krisina district (Jih Cabaily A.D.).


## Plati V

(a) Cast of Asokan edict at Jaugaḑa.
(b) Inscribsd lid of stone roliquary from Bhatţiprola.
(c) Ingcribed stone roliquary from Bhattiprolu.

(a)

(b)

(c)

## Platr VI

(a) Inscription from Amarivati (C. 200 B. C.).
(b) Inscription from AmarãvatI (Late 2nd Century A.D.).
(c) Inseription from Jaggayyapeta (3rd Century A.D.)

(a)

(b)


## Plate VII

(a) Pallava Grantha inscription from Kāñcipuram (7th Centary A.D.).
(b) Cola inscription on a hero stone from Kilmuttugurr, North Arcot district (10th eentury A.D.).

(a)


## Prate VIII

(a), (b), (c) Cola insoription of Rājarāja from Kalambäkkam, Chingleput distriok (11th Contury A.D.).


## Plati IX

(a) Inseription of Parthivendravarma from Madras (10th Century A.D.).
 vara tompls, Kinicipuram (10th Contury A.D.).
(c) Early Eastern Cilasyan iascription on the badz of a dotrapuaba fron Bozwada.

(a)

(b)

(c)

## P'AATE X

(a) Early Eeatern Cölukyan irscription from Addanki, Guntar diatriot (9th Century A.D.).
(b) Later Fastern Cāpkyan inscription fiom Rajahmundry, East Godavari district (11tb Ovatury A.D.).
(c) Cast of Vijayanagara oopper plate (15th Century A.D.).


## Plats XI]

(a) Early Wistern Cälukyan ingcribed carving from Annavara agrabâram, Nelloro distriet (7th Century A.D.).
(b) Later Western Calukyan inscription (11th Century A.D.).


ล



[^0]:    1 Even this one has suffered at the hands of ignorant temple renovators and split into bits it has served as building material part of which being irretriveably lost inside construction the remaining part has been resoued and preserved as a valusble troasure in the Madras Government Museum (P1. IX-b).

[^1]:    1 Includes Siddäpura, Brahmagiri, Jaținga Rämesvara; the Maski and Yerraguḍi inscriptions should be added to this list.

[^2]:    1 So says the Beloved of the Gods : Mother and father are to be waited on or honoured. Similarly respect for living ereatures should be firm. Truth should be spoken. Even these virtaous qualities should be practised or cultivated. Similarly a pupil ahould be respectful to his teacher and to his blood relations he ahould behave befittingly. This is the ancient standard (of virtue), it is conductive to long lifo. and thus it has to be practieel. Written hy Capada, the aoribo.

[^3]:    1 Members of the guild-Vacha (Skt. Vaisa), Cagha, Jeta (Skt, Jayanta) Jambha (Skt. Jambha), Tiaa (Skt, Tisya), Reta, Acina, Sabhika, Akhagha (Skt, Aksaghra), Kela, Kesa, Mäha, Seţa, Chadika (Skt, Chandika) Okhabula, Soputara (Skt. Sonotlara), Samana (8kt. Sramaŋィa), Sama indäsa (Skt. Sramanadäsa), Sämaka (Skt. Syämaka), Kämuka, Citaka.
    ${ }^{2}$ A casket and box are given by the Council of followers of the venerable Arahadina (Skt. Arhadatta). The work is executed by him whom king Kubiraka got to prepare the carving.
    ${ }^{3}$ The Paudyan country and the inscriptions in Proceedings and Transactions of the Third Oriental Conference 1924.

[^4]:    1 Citupoil Ilayar made this adhhisfanam for Kivudi Iten who was born at Kumarpúr，a village in Eruminiga．

[^5]:    1 In the third year of Mahärāja Kapiska, the third month of winter, the twenty-second day, on this aforeaaid day, the figure of Bodhisattva and an umbrella with handle (gifts) of the monk Bala, a master of the Tripitaka and fellow of the monk Pusysvuddhi, was consecrsted at BErippesi (Banaras) at the Lord's promenade, with his father and mother, with his teachers and professors, his fellows....

[^6]:    ${ }^{2}$ Mahäkistrapas Rudradaman, who has acquired great fame by study, memorising, understanding and proaction of grammar, music, logic and other great sciences, who....... management of horses, elephants and chariots, ane of sword and shield, pugilistic combat an other. . . . . acts of quickness or speed and einiciency of enemy forces, who day by day is in the habit of bestowing gifts, honouring and avoiding disrespect, who is most bounteous, whose treasury with rightfully acquired tribute, tolls and shares overflows with an accumulation of gold, silver, diamonds, beryls and other precious stones, who . . . . . prose and verse, clear, lucid, sweet dexterous, beautiful, nobly adorned by the proper use of words, whose lovely form has the best marks and signs like proper proportions, height voice, gait, colour, vigour and strength who himself acquired the name Mahäsatrapa who has been wreathed with many garlands as the Svayamvaras of princesse : (lit, king's daughters) -for . .cows and, Bifhma, as for e thomased years, to increase hiswoalth, religious merit and glory.*

[^7]:    ${ }^{1}$ Whose compmand was accepted by the entire circle of kings, whose face was lovely and pure liko tín lotus opened by the rays of the sun, whose horses had drunk the water of the three oceans, who was lovely to look at with the charm of the full lunar orb, whose gait was beautiful like that of a noble elephant, whose arms wore full. rounded, broad and long like the body of the lord of serpents, whose fearless hand was wet with the wator pourou out in assurances of protection, who without a stop attended on his mother, who well divided the plake and tame for the pursuit of the triple objects, i.e., dharma, artha and kama, who equally rejoiced and sorrowed at she jojs and sorrows of his citizens, who crushed the pride and conceit of Kgatriyas, who destroyed the Sakad, Yovenas and Pahlavas, who utilised taxes acquired righteonsly, who disliked hurting lifo even in the case of an envery kt fault, the promoter of the families of the twice-born and the lowly, who exterminated the race of the Khakharutae. who established the glory of the family of the Satavãhanas, whose feet were saluted by all provinces, who Al, ppord the contamuation of the four castes

[^8]:    - Suceese: Tho Mahntalavarí Adevi Catisiri, the daugleter of king Vilsithipputa Siri Cãtamûla of the Ik valke I. mily, performes of Astumcelhe sacrifice, donor of n why nores of gold coins, bundred thousnnd cown, humilred thumand plough lengths of heud, and of unhamiemd wecenauation in everything, the sister of king Siri Virapurisadata, the wite of Mahämcuipalt Miahülalavara and Mahädandanayaka Khapgavisakhampaka of tho Dhanuko fumily, having due regart lur both her families and to securo welfare and happiness for herself in both tho worlds has erveted this pillar at the Mahicaitya of the supremely enlightened Lord (Buddha) who is absorbed by the best elemento (ix., by mirväva). In the sixth (regnal) year of king Siri Virapurisadata, the sixth fortnight of the Gainy season, ine teath tys.

[^9]:    ${ }^{2}$ Success ! From the city of Kànci of Śivaskandavarma of the Bhâradvãja clan and Pallava family, performer of the sacriflice Agnistoma, Vajapeya and Asvamedha, righteous overlord of great kings.... In our tarritory everywhere royal princes, generals...

[^10]:    ${ }^{1}$ From the city of Kãñci Yuvamahäräja (His Royal Highness) Sivaskandavarma, of the clan of the Bhang: radvajas and of the Pallava farnily, commands his agent at Dhañ̄̃akaṭa.

[^11]:    ${ }^{1}$ Fromithe victorious camp in the city ं of Kudura king Sri Jayavarma of the Brhatphalãyana clan and worship－ per of the feet of Maheteqara commands－In Kuḍura．

[^12]:    ${ }^{2}$ Hail ! From the victorious cam! of Amrakavasaka Sri Mahärāja Duhrasena of the Traiküţakn family, cantemplative of the feet of his parents, performer of his duty to God, performer of the Advamedha sacrifice, 00 mm , can de all those resident in the Antarmandetrarea that to the Brāhmapa Nappusvämi residing in Kâpura....

[^13]:    1 Who, by the overflow of the multitude of his numerous virtues embellished by hundreds of good deeds, rub. bed out the fame of other rulers by the soles of his feet; who was incomprehensible like the ununderstandsble puruat (Vignu) as the ene of the rise and fill respectively of good and bad; who was compassionate and had e tender heart that could be won over by deviation and obeisance: who was a donor f f many hundrecla of thousand of cows ; whose mind was resolved to the ba red word and prantira cf tho uplift of miserable, lowly, helpless and. suffering humanity; who vas a lustrous or glorious personification if it adios to all beings; who was equal to Kabera, Varuna, Indra z nd Yams, whose officers were ever engaged in restoring the wealth of many things conquered by the might of his aras ; whys put to shame the preceptor of the lord of the gods (Brhaspati), Tumburu, Xärada and others by his sharp. br lliant intelloet, musiopl skill anil nrtixai necomptishmenta; who established his titles' king among poets 'by mut puaticil compositions that were the means of aubsiatence of scholars; whose many wonderful and not le deeds are worthy of praise for any length of time: who was a mortal only in so far as it required the performance of duties expected of man .by accepted conventions.

[^14]:    2 Salutation to Mishluva! Hail! After a hundred years increased by ninevy-one during the sovereignty of the Gupta ling, in the prosperous Minicaitra year, in the third 1 y of tins it is fortnight of the month Manga, on this day as specified by the year, month and day (Mähuraja Haztin) boga of the royal family of Parivrijaka
    

[^15]:    ${ }^{2}$ From the neighbourhood of the river Lauhitye to the Mahbondra mountain donse with puinn-grovea, from the snow-peakcd Himalaya mountain with its slopes cm.raced by Gangà to the Western Ocean, feudatories, with their pride humbled by the might of his arm, ronder the ground variegarted $y$ the interplay of the raya of their crest-jewels as they bow at his feet. Whose pair of feet is adorned with offerings of flowers from the crost by even that king Mihirakula, with the head experiencing pain in the act of the low safute that brcught down lia might of arm, Mihirakule whose head had never been subjected to the humility of obeisance excent tn Sthēgu (Siva) ${ }^{4}$ and by the embrace of whose arms the snow mountain bears the epithct Durgs, ie., well fortified and heese itaccessible. As if to measure heavea above or to count. . . . . . . . . . . . . . . . . . .

[^16]:    10 ml Hail! On this (gem-laden) earth, resting on the girdle of waves of the water of the four oceans and having islands, mountains and towns, during the year 300 of the Gupta era, when Mähärājädhiräja Sabanka wa ruling (from the bank of the Salimar river), with both its banks covered with a variety of flowers of excellent trees, like the celestial river (Gangā) that issued from heaven being brought down by Bhagiratha, its water streams falling on the top of the mountain Himalaya being divided into many streams by dashing and breaking against many rocks....

[^17]:    ${ }^{4}$ Om! Haill From the camp teeming with many shipe elephanta horses, chariots and infantry stationed there- (there was) the great devotee of Visnu, Mahāraja Sri King Saktdeva; his son that contemplated on his feet and born of the queen Sri Duyikádevi was the great devotee of Mahegvara King Vatsarảjadeva; his son that contemplated on his feet and born of queen Sri Sundergdevi was the great devotoe of Bhagavati (Devi) King Nagebhafa ; his aon that contemplated on his feet and borm of the queen Afrmad Isafadevi was the great devotee of the Sun god Mahärâja Śri King Rämabhadradeva; his son contemplated on his feet and born of the queen Sriwad AppsievI was the great devotee of Bhagavati, Maharaja-SrI King Bhojadeva ; his son contemplated on his feet born of the queen Sri Candrabhattãrikādevi was the great devotee of Bhagovati Maharaje-Śri King Mahendrapila-Sravasti. ..

[^18]:    1 It is known to you, this ephemeral nature of the world; that prosperity is like the wreath of flowers in spring pleasant to behold enly for a few days; that the life of beings in ever impermanent like dunes of sand particles of a stream on mountain slope; that sexual enjoyments are sweet on the surface but bitter in the end and not easily asaimilated like bad sesamum seeds ; that the sensory organs are pot easily satisfed being opposed to acrutinising of right and wrong like the charms of a courtgan; hence having consulted the Smrtis that are authoritative and in consonance with all Sastras, on thin Satarday the aksata third day of the dark fortnight of the month of Vaisaikha in the year eleven hundred increased by fifty-six on the Alcyata tritsya of the Yugådiparvan, having bathed in the Adiketāva gbatta at the sin-destroying confluence of the celestrial river Gangá and Varupã and having astiafied according to rights gods, sages, men, animals and manes, having adored the hot-rayed suu who possesses effulgence effective in dispelling the gathering of darkness, having worshipped Siva whose body is composed of earth, water, fire, wind,sky, sacrificier, cool-rayed moon and the gun and whose crest adornment is a alice of the lord of medicinal hebs (the moon), having performed worship of lord Vasudeva, having made offerings of excellent milk food and ghee to the enjoyer of sacrificial ghee (fire) and having finished the rites of food-offering to the manes, we (bereby make over) the above-mentioned village with ite areas of water and noil, mountain and forest, pits and marshes....

[^19]:    1 Om ! Victorious is (Siva) the one whose hair floats up skywards, who for the purpose of creation bears on his head that streak of the moon that is like the sprout of the seed of the universe. May those matted locks of the enemy of Smara (Cupid), brown like the bright curves of lighting towards the end of an aeon, always do you good. All well! The great lord paramount king of kings Sri Bhojadevs, who contemplates on the feet of the great lord paramount king of kings Sindhurijadeva, who contempletes on the feet of the great lord, paramount king of kings Sri Vákpatideva, who contemplates on the feet of the great lord, paramount king of kings Sri Siyakadeva..

[^20]:    ${ }_{2} 1$ flequghighly decorated clothes to the naked one (lit. quarter-clothed); to the lord who asaumed theform afthithin tify wis yoman (lit, lord of half a woman), hundred damsels with charming brows all withthe-beenty

[^21]:    the place of human bones, he so provided a dress to him that would be in accordance with the wish of the wearer of skulla at the time of the deluge. Making the whole expanse of earth devoid of a mecond golden imbrella by the (heroic) sports of his arm, he was left nothing that he can desire for. So what possibly can the half moon-crested one (Siva) grant him even though pleased to confer a boon! But (this we pray) He will grant him final union with Himself at the end of bis old age.
    ${ }^{1} \mathrm{Om}$ ! haill (of the family of the Gangas) who are fortunate, pure by excellent qualities praiseworthy of the whole world like kindness, liberality, courtesy, truthfulness, cleanlineas, herolam, bravery, etc., who belong to the Atreya clan, who are cleansed of the soot of the sinful dirt of the Kali age by the holy water of pure thought and deed, whose entire royal glory is effulgent with the unique conch, drum, five musical instrumenta, white umbrella, golden chauri and precious bull emblem all obtained by the grace of the Lord Gokarpasyàmi, the lord of all mobile and immobile things, the one architect for the creation of this entire universe, and the wearer of the moen as creat jewol....

[^22]:    ${ }^{1}$ On the massive head of the glorions Atyantakäma (over passionate), the remover of the pride of his enemies, Sfinidhi, the repository of wealth, who is flushod with passion, and is intent on the worship of Hara, dwells the sweet-faced Samkara, as it were in a large lake full of water for bathing and laden with divers lotuses by its being besprinkled with the water of the coronation bath and covered with bright jewels. By him who stands above the heads of kinga was built for the welfare of the world this temple of Sambhu (lofty) like Mount Kailäss or Mandara. May that Sribhara be long victorious, who bears Bhava as an ornament as it were in his mind humble in devotion, end supports the earth on his arm. Atiranzcanda (the extremely terrible one in battle) the lord of kingumade thia ftemple) Atirancandeśvara; may Pasupati with the daughter of the mountain (Pärvati), Guha and hil Omas alwaye take pleasure to remain here.

[^23]:    ${ }^{1}$ May that family of the kings decended from Vrgni, shining like (a string of) pearla, remain above the head of kings ; the family that like the pure flood of moon-light issued from the moon gladdening the world; on account of which the stain on the moon has disappeared; and for the conquest of the world by which the mountains of Asta (sunset) and Udaya (sunrise) Himßlaya and Malaya serve as pillars of victory with their slopes battered by the chisel-like rows of tuslcs of elephants in the army for which the four oceans became a hand-maid (as It were) adept in waving beautiful chauris in the form of the line of foam in the hand-like crests of their moving wave, for those (kings) born in which the goddess Ram@ (Lakshmi) produces the charm of a beautiful jewelled umbrella with her sportive lotus over their heads always associsted with the crown; though those incessant performers of sacrifices born in which are no more, yet even now ought to be seen the volumes of smoke from their horee saorifices as if sticking to the sky in the form of clouds; and as if to emulate those beloging to this family, they (i.s., the clouds) fetch from the four oceans over and over again and shower the best of their essence for the welfare of the world.

[^24]:    ${ }^{1} \mathrm{Om}$ Salutation to Siva. May that union of Hara and Gauri be victorious, union in which the face.and breasts are caressed (lit. kissed) by the left arm the fingers move out among the curly tresses resembling (in their movernent) a swarm of been in motion and which resembles a full blown white lotas with ita beauty enhanced by the flush of the red which is made obvious by the rays of the thousand-eyed sun god. May he be victorious the promoter of the Culuki family like Raghu with mind uncontaminated by Kali sin), delighting in charity like the son of Sürys (Karna), ever foud of adventure like Bhimar(lit. with attenuated belly like that of a wolf), the illustrious unimpeachable, noble Vijayāditya Satyăsraya, the beloved of Fortune and of Earth, Mahäräjadhirāja Paramésvara Bhatfäraka.

[^25]:    ${ }^{1}$ The hand of this (prince) without a peer in battle, having established itself on the alluring lower region of the earth-damsel, and after freely and softly preasing the central region, set itself on the regions of Kãñe (lit., the region of the city Kañel and the region of the girdle, i.e., below the waist) even as a lover's hand after establishing itself on the hip of a damsel that lures the heart, and freely and softly pressing the waist again sets itself on the region of the girdle or beneath the waist. From the Setu with blossoming eloven pulled by herds of mighty monkeys on the moutain slopes, to the mountain Kailiss, with its ends resounding with the jingle of the ankleta on the moving feet of Bhavannf, kings honour with their heads his command appearing like a crest garland touched by their hands in adoration as their knees rubbed the ground. When by the might of his arm he won the earth and desirous of further victory went to heaven as if to conquer it, in his illustrious seat sat his uncle king Sri Kranaräja of renowned valour. Of (that king whose) fame was full, expansive and bright, sporting itself in the degigns in sandal paste painted on the faces of the damsels namely the quarters......

[^26]:    ${ }^{1}$ Hail ! In the year of ten hundred with eight added to 论 after the time of the Saka king, in Sake 1000, on Fridajethe 3rd lunar day of the bright fortnight of Vaisakhe of the year Prabhava; during the prosperous, auspleiotn ind sictorious reign of Mahäräjödhiräja, Parameitara, Paramabhałfäraka Tribhuvansmalladeve, the refuget of the entire world, the beloved ef Fostune and of Earth, the beauty mark of the family of Satyigra ya the ornamet of Cajukifas; the dependent on thic lotus feet.....

[^27]:    ${ }^{1}$ The sports of Heramba' are victorious, aports wherein the three worlds are terrified by the sinking of the earth by the heavy tread of his feet, and consequent mingling of the streams of the seven oceans and where the rows of the principal mountains are made moving sportive walls. May that Hari in the sportive form of a boar protect the three worlds (Hari) who held the earth on the tip of his tusks even as she looked like a dark cloud on the peak of the snowelad (Himâlays) mountain, by the contact of whose body the entire seven oceans mixed up and flowed giving the illusion of drops of perspiratior caused by the fatigue of one awake after deep slumbse. There is the family of the Yadus famous in the three worlds and compherable to the ocean.

[^28]:    ${ }^{4}$ May that wonderful elephant (Gapapati), whose pleosure grove seers have understood to be Vedas, give you all immenee properity. Myy this (god) increase your welfare, for whom in hia boar form as he raised up the earth the ooean beoame the epportive pit. There is the most precious, unfading flower never cast off and born of the milly ooenn, which Sive wears on his heed. Of that repository or perennial joy (or aweet perfume) was born an offrpring named Yadu, the wondecfully eweot fruit of the penance of the earth. "In his distinguished family was born a king named Samgans who was like the joy incarnate of all his subjects. Of that repository of all gems among, all hie ton was the emperor Buike, like the Kaustubha among gems.

[^29]:    ${ }^{1}$ It has been seen from Pravarapura——he son's son of Mahäräja Śri Pravarasenaof the Vâkātaka family an moperor, of the Visjuv,thlint clan, and perforner of sacrifices like Agnistoma, Aptoryyäna, Ukthya, Soday Atirätra, Vijapeya. Briasptivava and Sadyaskära and four Adevamedha sacriffies, the dangher's son of Mâhăraja, Śri Bhavanăga, exee:lingly dovoted to the Lord Mahäbhairava and of the BhăraAiva family, whose royal house, originated owing to the supreme pleasure of Siva at the act of their carrying the Sivalinga placed on their shoulder who were bathed on their head (during coronation) by the pure water of the (river) Bhagirathi (Ganges) won by their valour and who had taken the avabhrta bath atfer performing ten Asvamedha sacrifices,son of Gautamiputra (Rudrasena) son of Mähäräja Śri Rudrasena of the Vakāłaka family (son of Ppthvisens), who was exceedingly devoted to Siva, was truthful, straigat, merciful........

[^30]:    ${ }^{2}$ Then arose a high. family of the twice-born with its circle of good qualities expanding like the rays of the moon, in which the sons of Hariti trod the path of the three Vedas, and which was born of the foremost of pis Manavya; in which the hair was wet with the bath of holy water of final ceremonies of different sacrifices, which was well versed in delving deep into the sacred lore, lit the (sacrificial) fire according to proper rites and drank soma (juice): the interior of who er houses was resounding with the study chant of the six subjects of study (Vedängas) all beginning with Om ; that performed without any simplification Chäturmäsya beorifice, burnt offerings, oblations, animal sacrifices and fortnightly sfäddha; with the daily ceremonies always fruitful by three sacrifices in the house always resorted to by guests, and having a single blooming Kadamba tree growing in the vicinity of the house. By the tending of this tr ce for these Brahmans eo-students there arose generally that distinguishing epithet which was the nature of sameness of name with the tree; when thus flourished the Kadamba family tifere arose an illustrious Brăhman named Mayurraśarman who was adorned with virtues like scholarship, conduct and purity.

[^31]:    1 Success, There can be no praise of the qualities of the all parvasive Lord in the strain "Mari has been victorionus or is victorious or will be victorious''; rather it is the Lord Himself Who is victory, the object of victory and the victorious. By the illustrious son of King Bhevadatta the foremost of the Nala family and the valiant destroyer of enemies was recaptured the uncertain and lost royal glory and repeopled the deserted city Puspari of his fathers and fore fathers and to his mother.

    2 To him belonging to this Gotra is it (the land) given; it may not be entered by the King's servants and is exempt from all taxes and dues; knowing this you should abide by the obligations already prevailing and brig measurable things, gold, etc.

[^32]:    ${ }^{2}$ Om ! Hail ! From Dantapura that emulates the city of gods, who is rid of all sins by the offioacy of merit earned by conatant obeisance to Lord Paramesvars, the cause of creation, existence and deatruation of the entire world, the thonsend-rayed sun in the expanse of the firmament of the apotlese family of the Gangas, the averlord of hosts of all vassal kinge overpowered by the edge of the spotless unsheathed aword Fictorious in many battles, with numerous four-tusked elephante, whose pair of feet was reddened by the eabrace through the scattering of the red lustre of the lovely gems set in the crowns of (vassals).

[^33]:    ${ }^{1}$ On, Hail; From the victorious Kslinganagars, pleasant in sill seasong-who is free from the blemishes of the Kali age by obeisance to the lotus-like pair of feet of Lord Gokarnomevami, the suprme architeot for the creation of the entire world, who is the receptacle of the wealth of modesty and wisdom, who gained overlordahip of the entire'Kalinga by the movement of the edge of his sword, whose spotless fame covered the surface of the earth girdled by the waves of the four oceans, who has caused the shouts of victory in the turmoil of many battles, famous of the pure Gangs family, who has subdued all his feudatories by his great might... .......

[^34]:    ${ }^{2}$ Om ! The Lord (Vignu) has been victorious ! Hail ! Prosperity ! From the victorious carp of Menmannulr the great grandson of Maharaja Sri Viravarma, the moat virtuous repository of penance and great warriorhood won by the might of his arm, who established all rules of conduct according to the precept of the Sastrae, who was abiding by the law and immeasurably great. . . . . . . . . . . . . .

[^35]:    ${ }^{1}$ Hail ! The Lord (Visqu) has beer victorious. From the royal ssat at Vijayapaffakarn-the great grandeon of Mahäraja Sri Viravarman, the moat virtuous, the repository of penance and warriorhood won by the might of his army, who established all celee of cocduct according to preoept of the Sastras, whowas abiding by the Law and immonsely great (grandson of Mak îrảjā Sri Skandavarman) of very great pogrer and suooess, with the whole cirole of kings subdued by his effulgence.

[^36]:    1 Hail 1 Om ! the Lord Padmanäbhs of the hue of the sky free from clouds has been victorious. Of the pros* petrous Mädhavavarma, of excellent qualities imbibed from his father, with keen intelligence trained by the understanding of the essential purpose of different sciences, clever in the exposition and practice of the signs of moral codes, who had achieved the purpose of a kingdom only by the proper protective rule of his subjects, son of the virtuous Maharaja, the prosperciys Konkanivarma, of the Kapvēyans clan, the Sun lighting up the firmament of the epotlees Gangs family, who medrhis territory full of good men by the speedy conquest with the might of his arm who was adorned by the wounds or used by a host of fierce foes, . . . . . . . . . . . . . . .

[^37]:    1 Om I Hail ! from Valabhi-to the family of the Maitrakas who subdued their enemies by force belonged the great devotee of Mahefvara, the commander-in-ohjef Sri Bhatarka, who gained glory in hundreds of battles waged with large hosta mighty beyond measure, who gained the devotion of those subdued by his valour through his gifts, courtesies and straightforwardness, who obtained the splendour of royalty by his devoted hereditary servants concourse of friend e and the (regular) array.

[^38]:    ${ }^{1}$ Hail ! Born of the family of Calkyas, meditative of the feet of the Lord, belonging to the clan of Mänavye the sonis of Hariti, whose heads are purified by the final avabhrta bath after the performance of sacrificee like Agnifioma, Agnicayana, Väjapeya, Paundarika. Bahusuvarsa and Asvamedha, Mangalisa, vietor in battles, en. dowed with the three powers (Prabhu, Mantra and Utsäha), full moon in the firmanent of the family of Calkyas, with his body embellished by his many good qualities, with his mind aet on the trath of the essence of all Sasiras, and opulent in great atrength, valour and bravery, in the twelfth of his over prosperous years of reign and (corree. pondingly)when five hundred years had elspsed from that of the time of the coronation of the salca king, his pais of feet tinged by the lustre of the gems on the crowns of \&ings subdued by him with the edge of his sword held in his hand, his auspicious abode being the earth extending to the four oooans won by him ; greatly devoted to $V_{i}{ }^{\circ} p u$ (Bhägavata), made a cave temple for Visau, exceeding the height of two rnen and of wonderful workmanahip, extensive in ita major and minor parta, ceiling and sides all extremely beautiful, to behold, and in it on the fall moon day Mahakarirtika month having given great gifts to Brähmsns, for eatablishing gloriously the image of Vispu, who extirpated the hosts of dernons (lit. foes of Gods) with his discus resombling in shape the solar dive -ingring after the deluge, the village Lañjtsivara (was given) for the offering of daily werkship to sixteen . . .

[^39]:    $10 \mathrm{~m}!$ Victorious is the self-born cause of the universe (Brahman); victorious is Murari (Vispu) the beloved One (lit. son but meaning brother in this case) of Indra; victorious is also the God (Siva) whose body is closely embraced by the daughter of the Mountain (Parvati) and who removes sin and consequent fear. May that One (Viagu) protect you whose navel lotus was made his abode by Brahman and also Mara (Siva) by whose beautiful moon digit was adorned the sky. Wonderful it is how Nirupama became Kalivallabha (lit. beloved of Kali) having by hie pure deeds driven off, Kali (sin personified) who had established himself lately, quite afar from the surface of the earth, and again reatored fully thooharm of the Kra age (the Golden age). King Govinds . . .

[^40]:    10 m I Obeisence to Sambhu the basie pole for the erection of the throe worlds beautiful with the Hoon baurlike 'kiasing His lofty head. For proper understanding of worda and their conotation I salute Pärvati and ramedvara, the parents of the Wniverae, who are united closoly like a word and ita meaning. On! Salutat: Sive Om I Hail I The refuge of the whole world. Sri Prthvivallabba Maharajadhiraja, Parameivara in of the kinga of kinge), the Great Lord the jewel (lit, beauty mark on foreheed) of the famil -a (ornament of the) Calukyas

[^41]:    ${ }^{1}$ Adoration always, to both Kesava and Siva who are each individually to the three worlda and witneas of all acta and the ordainers of the fruit thereof. Arti was born of the one born of the navel lotas of the Lord of Sri (Visnu); Ayus was born of Purouravas, son of Budha, son of the Moon, born Atri; from him Nahuse, from Nahuse, Yayati ; and from him Yadu; in the family of Yadu many were born. Among thone renowned (kings) a certain king. Sala was once told in the forest by a great sage thus "Poyasala" in regard to a ferocious tiger ; and hence his name became even so.

[^42]:    ${ }^{17}$ From the victorious Vengipura. ..................... of king Vijavadevavarma who conternplatee on the feet of the Lord Cittaratrhasimi, is a devotee ; at the feet of Beppabhaftiraks, who is a devout worshipper of Mahelvars, who belongs to the Salankiyana family and who has performed the horse asarifioe.........

[^43]:    1 Hail! From the camp at victorious Lendulıu (Mahărāja Indrabhatfărakavarman) that meditator on the feet of the Lord of Sriparvate, belonging to the family of Vispukupdins (great grandson of Mahärâja Mädhava varna) who cleansed the strain of the world by the purifactory bath after the performance of eleven horse sacrifices, who performed a thousand sccrifices, who obtained the happiness of all beings through his sacrifices, who (performed) Bahuswearga Paundarika, Purupamedha.......

[^44]:    ${ }^{3}$ Hail! From the camp ai prosperous Pistapura (Vigoui ardhana) great grandson of Ragaraiga who had oftea experienced the taste of battle to elevate the family of the Cajukyas of the Manavya clan and sons of Hariti, fostered by Mahsisena (Kärttikeya) who was victorious over the griat army of the gons of Danu (Damons), and protected by the (saven) Mothers, the very mothers of thray woids; grandson of Ranavikrama whose volour was unbearable; dear son of Kirttivarma of great fame ; dear younger brother of Satyasiraya Vallabba Mahärāja who subjugated the whole expanse of the earth by his triple power (Śaktitraya-Prabhu, Mantra and Uteaha); who by the edge of his sword subdued.

[^45]:    ${ }^{2}$ King. When he mounted the elephant his hoste of foes climbed the tops of mountains; when his hand grasped the sword the hands of the wives of his enemies took up the chauris; when he knit his browa the bees cellected honey in the palaces of his foes; and after the sound of the war drum in his palace the ahe-jackala howled in the mansions of his enemies. His dear son; as the moon is for light, the earth for patience, the oelestial tree for power to bestow, the sun far brilliance, the lion for bravery, the ocean for great nobillty, (mo he was) the abode.

[^46]:    1 When that king ruled, the land was beautiful with abundance of many succeasful orops, had cows alwaya yielding milk, was free from fear, drought and othur troubles, disease and thieves. That suzerain lord of kings, great sovereign, highly pious,meditator of the feet of his parents, whose pair of lotus feet is kisaed by awarms of bees in the shape of the numerous gems set on the surface of the crowns of all enemy kings, who shines as a bee on the lotus feet of Brahmă, elevated In his self respect and of auperior bearing, representing all the world, the refugee of the whole world. Sri Vijayiditya, oalled the husbandmen including the principal ones like the Ragrakurua living in the twelve villagea of Prindoru in the Pavanavira diatriot . . .

[^47]:    1 From the great navel lotus of Lord Nãrãyana，the best among Purugas and the abode of Sri，arose the ael bom（Brahmè）creator of the universe ；from him was lorn his mind－born son known as Atri；frcm that sege Atri was born the moon，the progenetor of the race，ambrosiac is his rays，and the crest jewel of Siva whose neck is singed on．From that producer of ambrosia（moon）arose Budhe and from him Budhe＇s aon

[^48]:    ${ }^{3}$ Hail ! Prosperity ! Victorious is the boar-ahaped Hari by whose continuous flow of sweat waa filled the ocean (lit. mass of water) the mass of water in which was drained by his horripulation as he was excited in the set of tmbrace of the heavy breasts of the lovingly agitated Prithvi. The digit of the orest-jowel moon is viotorious as the probable budding tuek of Herambe (Gapeia), or as the sportive lamp flame in the vicinity bf Gauri'a necret aport, or as the lotus bud of the Ganges, or charming as the goad placed on the head of the god who is the foe of Tripura by his victor, the flower-arrowed Manmaths. May Lambodara (Gapeda) proteet you, who in his evening sporta of patting the waves of the river Mandakini (Ganga) atrikes the surface of the rolling waves for responding to the movements of the artistic Srabhafi dance of the Lord Sambhu by starting the sounding' of the water-drum ( Falataranga).

[^49]:    ${ }^{1}$ Gods, men, fore-fathers, Gandharvas, Nägas, Rakssasas, immobile objects all resort to a tank (lit, reservoir of water). That person gains the fruit of an Assamedha sacrifice in whoae tanle thirsty cows and other animals, bitils, and men drink water. Fathers pat themselves and grandfathers danee abont in glee (at the thought) that indeed he is born in our family who will dig a tank. Srinatha, a mine of literature and the Director of Publio Instruction of the heroic king Vems composed this pure charter of charity.

    Prosperity. It (ocean) was well trampled by the hoofs of the enemy of the demon Kaitabha (Vişnu) when he essumed the guise of a boar ; it dried up at the beat of the fiery arrows releaned from the bow of the goion of the Ragha family (Rama) ; it diminished having become a mouthful sip in the form of the lotus hand of the pitcher-born eage Agastys ; (bridged across) with boulders it got fettered at the hands of bears, langurs and monkey troops. How can this ocean be said to be equal to this peerless lotus tank (dug) for progeny, which is full of water deep esough to reach the netherworld, free from mishapes and beautiful to behold.

[^50]:    1. Salutation to the Lord of Gaphs. With his eyes closed in joy at the rubbing of the high breasta of Lakshral and consequently as the navel lotus elosed up covering the Lord of Speech (Brahm玉̂) and being freely and cloeely embraced by her (Lakşmi), may Madhava joyously protect Mädanrpâla Timma.

    Prosperity. In the victorious and prosperous ; Śalivàhana Śaka year 1492 on this day of Viévavesu, bright fortnight of Caitra 3, Thursday, when the royal lord king of kinga Srí Virapratāpa Śri Virasadasiva Mahärâja was seated on his jewelled throne ip the city of Vidyãnagara and with a single umbrella raised only over his head ruled the earth.

[^51]:    ${ }^{2}$ He of imoomprehensible clever designs.
    He of unquestionable command.
    He of intense love.
    He the receptacle of the world.
    2 The abode (tẹmple) of Éri Atyantakåmapallaveévara (Siva established by the Pallava Atyantakims).

[^52]:    ${ }^{2}$ May the Bull-bannered Lord (Siva) always make himself present in this manaiph (temple) of same bearing the epithet of Rajaaimhefvara, robbing the beauty of Mount Kailasa as it were, with its pinnacles looking the alky as it were, built by the righteous king of kings (Rajasimhs)s royal lion to the packed troops of elephants of enemise who made all the quarters obedient to his command. Verily Cupid is he in pleasing in private ladies of good aesthetic taste, Indra is be ever protecting the followers of the three Vedas, Madhava (Vispu) he is in tearing the heart of the enemies of ages, the twice-born and the gods, Kubers he is in pleasing goodman' with abundanceof wealth.

[^53]:    ${ }^{1}$ Parameß́varavarman with higher vision than all like Parameavara; who overcame all like Bharata; who abandoned everything unworthy (asamañjasa) like Sagara who abondoned Asamañjasa; who had well-developed limba like Kargs who possessed the flouriahing country of Angs ; who loved literature (Kanya) Iike Yayati who Ioyed Kavya (the Guru of Daityas) ; whose command was always an infliction to unsubdued kinga but which itself added lustre to the faces of friendly ones being like an ear ornament; being clever in the lure of arta he, weis always a moon to Cupid; with bad qualities removed from his heart he was like a string of pearls on the breasta of women; with a mist of dust cansed by a stampede of innumerable men, horses and elephanta oreating for the circle of the thousand rayed sun a strange likeness to the lunar dise fearful with the din of thundering war-drums, unaheathed swords flashing like lightning everywhere, elephents moving like (dark) clouds as if it were the appearande of rain menemal ; tall horses billow-like. .

[^54]:    ${ }^{2}$ Hail! Vietorious is the supreme Brahman, the cause of the birth, being and dissolution of the three worlds, the eternal, without an end or beginning, of the nature of knowledge, one and only the seat of eternity. May the Lord Trivikrams bring your fortune, who was a diasembler begging for a (space of) three feet and suddenly expanding at the sacrifice of Bati occupied the three worda by his strides. May Hara increase your prosperity, who beara the moon on his head, the hooded smake on his shoulder, Bhavãni to his left, restorer of Käma on repeated prostration, bearer of Gangsi on his head, of ashes on his body, of poison in his neck, and of Trivepl or braid of Pärvati amidst his locka and the Trikola in his hand. May the two (Hari and Hara) who bear the supreme lustre of the jowel Kaustubha and the dark poison on throat, hold the demon-killing diseus and elub are dark and fair in complexion and with the rays of the glances of Sri (Laksmi) and Gauri (Parvati)

[^55]:    ${ }^{1}$ Prosperity 1 Without attachment to this world where those seen (to-day) are not seen (to-morrow), without brooding over the impending (final) day appointed by the Creator ; before you are worn by old age with its (appondage of) a stick; if you have anything, enjoy (yourself) and the rest, so give away that the world knowa it.

[^56]:    ${ }^{1}$ The son of Mara, Madhurakavi, resident of Karavandapura, prosperous, able, most sweet-tempered belonging to a family of physiciana built this atone temple of Vispu. That same intelligent miniater of the Págdya king called Parintaka, gave this immerussably rich (agrahära) to the first born (Brahmana).

[^57]:    ${ }^{2}$ Being ordered by Cola the destroyer of Madhura (Madhurinntaka) that in consideration of their poverty no taxes like royal dues ahould be levied it was alao anthorized by those city magnates. The house-holders living in Colaniyama along with the managers of the temple of Hari situated in Oraka should individually prepase monthly accounta of income and expenditure and show them to the royal weavera living in the four quarters. In the 16th year of the prosperous king Parakesarivarman alia Śri Uttama Coladeve, when (this) Lord was pleased to be present in the Citra-mandapa hall to the south within the palace at Kaccippedu the officer Colamuvendavelär (requested) the king-that (for the deity) of this Kaccippedu

[^58]:    ${ }^{1}$ Hail 1 Prosperity I In (his) life of great prosperity (during which he) rejoiced that while fortune having become constant was increasing, the goddess of the great earth, the goddess of victory in battle, and the matchless goddess of fame had become his great queens (conquered with his great and war-like army) IdaiturainAdu, Vanad wish whose warriors (were protected by) walls of continuous forest, Kollippalckai wise walls were surrounded by bali trees. . .

[^59]:    ${ }^{1}$ May that Primal (deity, i.e., Vinayaka), the destroyer of darkness. of obatacles, the offspring of the primal couple and the rich in kindess without a peer, increase (our) prosperity. I bow to him (Siva) the left half of whose body is entirly composed of mercy, who is adoned by excellent virtue, who has the moon's digit for ormament and the three lights (sun, moon and fire) for his eyes. Salutation to that lustre (Varāhamürti) in the form of a Boar, whose hand is marked by horripulation by the loving embrace of Bha (the earth), and who eqhances the glory of Sri (prosperity) I bow to Medini (earth), the jewel on the hoods of Ananta, the chariot of (Siya) the bowmen who carries Mount Meru as his bow, the peahen on the piller-like arm of Visnu. In the pleesant lunar race was born the supremely righteous Yadu in whoe family the lotus-eyed Lord (Visnu) was born as an incarnation Kryr.a). In that family King Saggams was born.

[^60]:    ${ }^{1}$ Märangari alias Vaidyan Muvendamangalapperaraiyan of Kalakkudi, the prime minister of King Mārañjadayan, madethis stone temple and ascended heaven without consecrating it. Later his younger brother Märaneyanan alias Pänidmañgalavisaiyaraiyan, who attained to the position of prime minister made this Mukhamandapa and consecrated (the shrine).

[^61]:    * Early Cola seript is also iliustrated in pl. VII - b and pl. IX - ab.

    1 An early Eastern Calukyan dvărapåla, iatoribłd on the Dack, is dieplayed in the gallery (IX - C).

